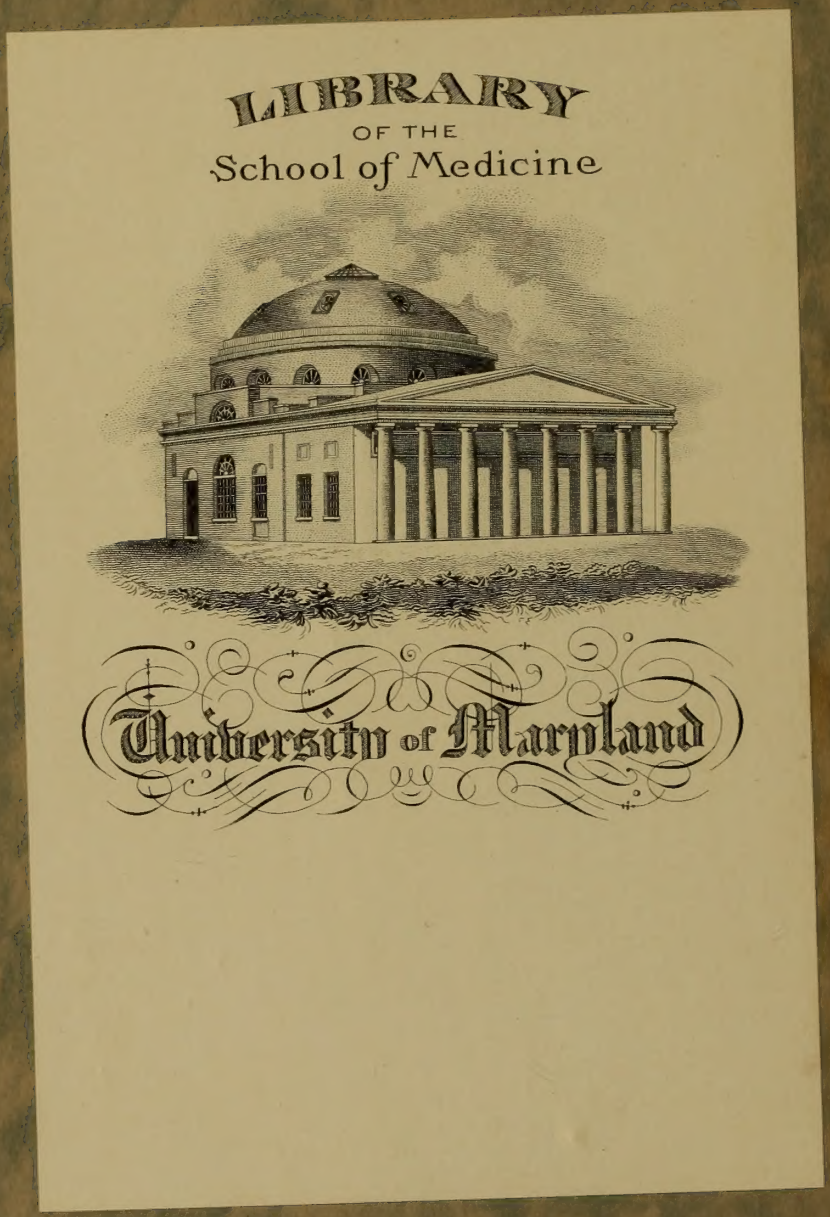
BOOKS OF ALL DESCRIPTIONS

JUN 14 1940



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The project team who investigated and corrected the tables of contents were: Richard J. Dexter, Historical Collection Preservation Officer, Mark Wingfield Fisher, Metadata Management Librarian, Angela Cockburn and Claire Hartley-Ebsary, Resources Division, Sarah Hirsch, Abby Leibman and Morgan Wolff, Services Division.

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University of Maryland Theses

Early Doctor of Medicine and Doctor of Physic Dissertations with Corrected Tables of Contents

These manuscripts described as either an Inaugural Dissertation or an Inaugural Essay were presented to the University of Maryland for the Degree of Doctor of Medicine and/or Doctor of Physic during the years 1813-1887. The individual dissertations were bound together during the 1940's. The original tables of contents for the bound volumes contained multiple errors in authors' names, titles, and/or years. To address these errors, an additional "Corrected Table of Contents" has been inserted at the beginning of each volume.

The project team who investigated and corrected the tables of contents were Richard J. Behles, Historical Librarian/Preservation Officer; María Milagros Pinkas, Metadata Management Librarian; Angela Cochrane and Carol Harling-Henry, Resources Division; Sarah Hovde, Abra Schnur and Megan Wolff, Services Division.

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(CORRECTED TABLE OF CONTENTS)

UNIVERSITY OF MARYLAND

THESES

1868 (a)

Author	Title
Miller, C. Edward	Clinical Report of Seven Cases
Belt, George D.	Inflammation
Scott, Lee	Alcohol, Its Use and Abuse
Grimes, Harry J.	Cholera Infantum
Thompson, Knox	Alcohol
McCormick, Cyrus	Phthisis Pulmonalis
Early, William W.	Permanent Stricture of the Urethra
Chesley, James B.	Delirium Tremens
Finch, Edward Willis	Opium
Moncure, James Dunlop	The Physiology of the Encephalon
Baker, Newton D.	Pneumonia

HSHSL 2012 for the UM Digital Archive. Sources consulted for corrections: Original Dissertation; University of Maryland Medical Faculty, Matriculation List, 1851-1892; Cordell, Eugene F. "University of Maryland, 1807-1907" (New York : The Lewis Publishing Company, 1907), Volume 2.

UNIVERSITY OF MARYLAND

THESES

1868

Miller, C. ~~E.~~ Edward	Clinical Report of Seven Cases	26p.
Belt, ~~G.~~ George D.	Inflammation	69p.
Scott, Lee	Alcohol, Its Use and Abuse	38p.
Grimes, ~~H.~~ Harry J.	Cholera Infantum	42p.
Thompson, ~~Enser~~ Knox	Alcohol	25p.
McCormick, Cyrus	Phthisis Pulmonalis	32p.
Early, ~~Wm.~~ William W.	Permanent Stricture of the Urethra	29p.
Chesley, ~~J.~~ James B.	Delerium Tremens	20p.
Finch, ~~E.~~ Edward Willis	Opium	20p.
Moncure, ~~J.~~ James Dunlop	The Physiology of the Encephalon	79p.
Baker, ~~N.~~ Newton D.	Pneumonia	28p.

AN

Inaugural Dissertation

ON

A Clinical Report of Seven Cases

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

C. Edward Miller

Of

Baltimore Maryland

Session of 16 18

1 Mt
18953

Founded 1813
SCHOOL OF MEDICINE

To

James E. Shrimpton M.D.

The following Inaugural Dissertation is most respectfully dedicated as a tribute of sincere gratitude and high respect for the many kindnesses and valuable advice received from him, while pursuing my medical studies under his able guidance and fostering care.

C. Ed. Hille

1869

Case 1st.

[illegible]

[illegible] led me to attend to the [illegible] [illegible] examination [illegible] inguinal hernia on the right side. I at once proceeded to reduce it by taxis into the abdominal cavity but without any success whatever. The tumor caused by the protrusion of part of the intestine through the external abdominal ring was intensely hard and painful, the slightest manipulation would make [illegible] [illegible] discontinued [illegible]

[illegible]

tumor as it was [illegible] to get a good chance at it. To which he very reluctantly yielded, he finally consented to let me make an other attempt. I commenced this time by having him placed upon a lounge, [illegible] reduce it if possible, I went to work. And admirably succeeded in relieving the poor [illegible] before I [illegible] followed in the [illegible] patient [illegible]

tell the truth for [illegible]

[illegible] and said

it was a good [illegible]

[illegible]

[illegible] the husband [illegible]

[illegible] good [illegible] [illegible]

several Morphia Powders [illegible]

[illegible] would stay [illegible]

[illegible]

but I found that after the reduction of the Hernia he did not manifest the least pain, deemed it unnecessary, to the contrary gave him 15 grs. of Hyd. Chlor. Mit. at bed time to be followed in the morning by a Seidlitz powder, he not having had a passage for 4 or 5 days. This was all the treatment necessary in this case as the patient recovered without any difficulty.

Case 2nd.

Two Cases: Tonic Glass Contractions, the Uterus

Dec. 4th 1868. at 11 P.M. I received a hasty call to go to Mrs. L.'s. the messenger informed me that she had been delivered of a healthy boy an hour and a half previous, The after-birth had not yet come away. Immediately on-hearing the call, I found the woman in good condition only laboring under great mental anxiety, and continually crying out "Oh! I am going to die!" "Oh I am going to die!" I made an examination per vaginam, and found the following condition of things. The vaginal was well lubricated by the secretions of the parts, but the uterus was high up in the abdomen and was unmanageable to get at. I tried several positions to get at it satisfactorily, all being insufficient at last I concluded to lie down upon my back, and by that position, I found it to be just which

I wanted, after I had introduced my right hand I could manipulate it quite freely without giving her great pain. The placenta cord was my guide to the entrance of the womb, and found that the orifice was distended but about midway I found that it had contracted down upon the placenta and cord so hard that it felt like ring of bone. I endeavored to force an entrance through the stricture, but was unsuccessful for over an hour. When gradually I felt the rigidity of the contracted portion of the fibres to yield to the persevering pressure which I brought to bear upon the parts. The method of introduction was, which I presume is practiced by every practitioner. First to gain entrance with one finger then as the constriction yields follow it up

with the remainder till all are engaged in the duty of expansion. When it was sufficiently dilated so that I could get my whole hand above the constriction I "pared off the placenta gradually" and firmly seizing it I gently withdrew it from where it had been so completely retained. No hemorrhage of any consequence followed. She made good her recovery in ten days after her confinement.

Case No 2. The

Case 3rd.

second case of which I will speak was that of Mrs. P. age 38 I was called upon during the absence of my Preceptor on Sabbath morning May 10th 1868. This case in many respects was similar to my first. The child was born several hours before I saw the woman, a Midwife

being present - she being very reluctant to send for a regular practitioner. When I arrived the midwife informed me that she had tried all available means to take away the placenta, but without success. I made a vaginal examination and found that like my first case the placenta had been completely retained above the constriction. I found the womb in about the same situation, as I did in case No 1. it being high up in the abdomen and difficult to get at. I used the same modus operandi as in the foregoing case, and succeeded admirably. The only difference of this case from the other was, "that the constriction was not so persistent as case No 1. She met with no obstacle in the way of

recovery, over that it was more protracted. I presume that was caused from the nature that she was rather delicate and of a weak constitution.

Case 4th.

Case 4th

A case of Fracture of the Skull

Mr. H.H. age 53 was seriously injured by having his Skull fractured by a heavy blow from a spittoon in the hands of one of his boarders, who was at the time under the influence of alcoholic stimulants. My Preceptor being called upon but being absent, I answered the summons. When I examined the wound I found that it extended an inch and a half, almost parallel with the left eye brow. I introduced my finger then my probe, & found that the skull was fractured to the extend of two inches.

The fissure commencing at the sub-orbitar arch and running in a little different direction from the wound, cost itself in the subaciliary ridge. I found him quite unconscious with free hemorrhage from the nose and mouth. I had him placed upon a bed and made as comfortable as possible, ordering cold applications to his head. At 11 O'Clock P.M. or four hours after the casualty I found him somewhat better, and ordered the continuation of the applications till morning. Saw him again at eight O'clock A.M. next day, he then had a very high fever and almost incessant cough, caused as he said by the trickling of blood down through the nares into the fauces, and being occasionally delirious. His bowels not having been moved for several days, I ordered a tablespoonful of

Aromatic Syrup of Sennae, with a drop of Ol. Tiglii every 3 hours till freely purged. At six P.M. saw him again, and was informed that the purgative had operated freely, after the second dose, the cough had almost ceased, but the fever had but little abated in its violence. I ordered Pulv. Ipecac Et Opii ℥ss in Chart. iv. one to be taken every 2 hours till sleep was produced.

On the third day when I visited my patient, I had the gratification of hearing that he had slept nearly all night, he having taken but one powder, which produced the desired effect. He was perfectly rational with only slight pain over the frontal bone, the cough had ~~be~~ entirely ceased with little hemorrhage from the nose.

In the evening he took another powder which again brought him under its influence and upon waking next morning felt quite refreshed.

He continued to improve from day to day until he made a complete recovery. The wound being more of a contusion than a cut it matterated considerably, but it gradually healed without any bad symptoms by the application of warm fomentations.

Of course this case struck me very forcibly that it was one of simple fracture. The diagnosis was so simple and noncomplicated that one could not but be impressed with the idea of its nature and the modus operandi of its treatment. We could clearly trace the fissure almost —

from the beginning to its termination, either with the probe or finger nail, with the hemorrhage from the nose and mouth seems to prove conclusively the amount of danger inflicted on the skull by the blow. Though I do not believe that the internal structure or petrous portion of the skull was fractured or my patient would not perhaps so soon have shown symptoms of recovery.

Fractures

During the last two years in which I assisted my Preceptor in attending to portion of the calls which he received I had the opportunity of seeing the following number fractures, Viz. 23.

I actually assisted my Preceptor in seven cases, in the remaining

16 I reduced the fracture myself, or assisted by some member of the patients family. Of these 14 were of the lower extremity, and 9 of the upper, a further division of the fractures of the lower extremities is as follows. 3 of the thigh - 2 at the lower third and one at the middle, (of these two were children respectively, 2 and 9 years of age). Of the tibia and fibula 6 - 4 at the lower third, and 2 at the middle. I also observed in every instance but one, that the fibula was fractured higher up than the tibia, of the tibia alone 1, and that at the lower third, of the fibula alone 4. all of the lower third. One of the fractures of the Tibia and Fibula was compound and one comminuted.

Fractures

of the upper extremities were 9 in number

viz. one of the humerus at the upper third, two of the radius near the wrist joint, and six of the radius and ulna, all at the lower third. Of these five were children under twelve years of age, The fractures of the radius and ulna, were all transverse and easily diagnosed.

Thirteen were Males and Ten Females. Fifteen Adults and Eight Children.

Fractures of the right arm seven - of the right leg ten, total 17. Fracture of the left arm two, of the left leg four, total 6. Grand Total 23.

These fractures occured in various ways, every one of them accidentally, principally by falls. The treatment varied with the extend of the

injury, in the subjects which I treated not one of them being constitutionally affected with any chronic disease, which might have produced some deleterious action upon the parts impaired. All of them being young with but few exceptions, and of the working class of people. Their previous physical health and strength made it a point decidedly in my favor. Consequently I met with great success in their treatment.

The only splints I made use of was Prof. N.R. Smith's anterior splint and the common paste board splint, with the starched bandage. I would in every instance by the aid of an assistant have the parts, or ends of the fractured bone brought in as thorough an apposition as possible.

Then I would wrap a layer of bandage around the limb then follow with the baste board previously cut into shape, and soaked in water, immediately over the fractured part. then follow that with a double or triple layer of bandage. If I would deem it necessary I would apply a coating of starch which would make it very firm and hard and keep it perfectly in situ. This I would leave on as a general rule from six to eight weeks never taking it off till I was perfectly satisfied that the bone had firmly united.

I never thought that it was necessary to bring Smith's anterior splint into requisition only when there was a bad break, and a long and tedious case before me.

I have used it on several occasions where the leg was badly contused and fractured with very good results. The main reason I suppose of its non universal adoption is - that it is not always at hand.

A Case of Opium Poisoning

SC
Ph.

July 11 1868 I was suddenly called upon, during the absence of my Preceptor to attend to a case of poisoning. One T.C. age 42 a wagoner by trade was supposed to have poisoned himself by taking into his stomach some poisonous drug. I remember distinctly the general appearance of the man when I first saw him. The symptoms of the case as they made themselves manifest

could easily be diagnosed as those of some strong narcotic. I was informed by some of his friends that he was seen producing a paper from his pocket, and swallow the contents of it. I saw the paper it had no label on but simply the inscription of Morphine. The quantity taken I could not ascertain, no one about the house knew that he had it; I suppose it must have been about two grains, do not think that less than two grains could produce such decided effects upon the system, I was also informed that he had been strictly temperate up to date, but through some cause he liberally indulged in strong drink this day, coming home very intoxicated, at a moment of despair or frenzy intended upon self

destruction. When I saw him he was perfectly insensible to all surrounding objects, even to rough shaking and loud calling. The dashing of cold water in his face had or made but little impression. His pupils were contracted, skin cold and clammy, pulse full and slow - respiration stertorous.

I had him placed upon his feet, and walked up and down the floor, seemingly with no benefit. Finally I succeeded in introducing the stomach pump, but could not get it work satisfactory, so I filled a good size syringe with a solution of Sulph. of Zinc, about Zss. of the salt to the whole, and forced it through the pump into the stomach, which caused him to vomit.

quite freely. I then injected hypodermically a solution of atropia, 1/60 of a grain to the injection, which I repeated twice at an interval of half an hour, with marked success. He began to show symptoms of recovery, an hour and a half after I first saw him. and at 11 O'Clock P.M. 3 hours after my first visit, he had sufficiently revived trough the diligent application of the above remedial agents, to pronounce him out of danger.

I attribute the success of this case to a great extent to the efforts of his friends, who worked with untiring zeal for nearly three hours.

Rubeola

Case 11.

I have seen during the summer and winter of 1867 & 8 - 70 cases of measles. The children who were attacked by Rubeola usually passed through the regular course of the disease with hardly any deviation. The rash as a general rule made its appearance at the usual time, the fourth day, with all the forerunners symptoms, such as the watery eyes sneezing and languidness. Etc.

If the rash made its appearance in a bright pink colour we would have but little trouble in treating the case, would simply regulate the diet. If constipation intervened, would administer a mild laxative, and if fever, would give a mixture of Spt. Aether. Nitr. Liq Ammon. Acetatis. Vinum

of Ipecac or Squillae with very good effect. Frequently the chief symptoms were Cough and Diarrhoea; and they were generally ameliorated, by giving Tinct. Opii Camph. and small doses of Subnitrate of Bismuth and Pulv. Ipecac. Et Opii. alone or in combination. At times would add Tolasac Chloral to allay inflammation of the fauces, and musk or mustard Poultices externally to the chest, which would often act beneficially. Under this course of treatment I would meet with the happiest results. The Children as a general rule would make good their recovery in about 8 or 12 days.

I also distinctly remember five cases which differed from the other group in many respects.

These Children would be taken with all the forecursory symptoms of Rubeola. The rash would make its appearance about the fourth day, or a day later but very scanty, and the colour of the rash or eruption would assume somewhat a leather colour. Skin dusky hot and dry, continually rolling of the head, very cross and sometimes stupor. Frequent dysenteric stool with severe straining (out of the five cases three had prolapsis ani) caused by the severe straining. Also excoriation of the mucous membrane of the nose, with the scattered appearance of an eruption resembling small boils, which would inflame and sometimes suppurate. notwithstanding active inflammation, but seemingly of a slow smouldering nature.

In this condition in spite of the application of popular remedial agents, the patient would gradually sink and die.

These aggravated symptoms I would only meet in children, who through poverty could not obtain sufficient healthy food, and who were greatly exposed to the vicissitudes of the weather.

The treatment which I adopted in these cases was principally supporting, with no aperient benefit. The depletory treatment I could not introduce as the patient was generally too prostrated; with the impoverished condition of the blood, made me hesitate to do otherwise than support the system.

All in all it resembled a typhoid or rather typhus —

condition of things more than any other disease I know of, a peculiar fetid odor with the accummulation of sordes about the teeth, was one of the most characteristic of this low type of fever.

AN

Inaugural Dissertation

ON

Inflammation

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

George D. Bell

Of

Carroll County Maryland.

Session of 1867+68

A Treatise upon
Inflammation

by

George D. Bell

of

Hartsbrad, Carroll Co.
Ind.,

Feb. 12th 1868

Inflammation

Acute and Chronic

Inflammation may be defined to be a state in which there is a tendency to morbid secretion and change, [illegible] accompanied by increased vascularity and sensibility; or to be a perverted condition of the blood and blood vessels of a part interfering its healthy function and [illegible] its normal structure; or better still local depressed nutrition; Ordinarily attended with redness, pain, heat and, swelling [illegible]

[illegible] is more to inflammation; and next to fever, this is the most important [illegible]

denotes Rs 10. 9 1

[illegible]

1st. The [illegible]

[illegible] and the deep wounds in [illegible]

[illegible] must now alike require inflammation

[illegible] unite the divided parts; in

[illegible] ded by what surgeons call "union by the

first intention" i.e. union without suppu-

ration. [illegible] in [illegible]

[illegible]

[illegible] anticipated by the knife

[illegible] will sever the dead and useless part

from the sound. If abscesses form in wounds,

[illegible]

may be the external surface of the [illegible],

which they always tend [illegible]

[illegible]

[illegible]

[illegible]

[illegible]; whatever organ is affected, [illegible]

instance becomes adherent to the walls of the

[illegible] on the one hand or [illegible]

canal on the other; and [illegible]

[illegible] gaping out of the way. [illegible]

tion, moderate in degree and limited

[illegible], becomes conservative by

[illegible]

[illegible]

[illegible]

[illegible] demands most careful study.

[illegible]

nature, the surgeon

control ~~and direct~~ and direct the

[illegible]

[illegible], and then being in a great degree be

[illegible] cause. [illegible] would become

[illegible]

[illegible] ater of a hydrocele,

[illegible] excites inflammation of the tunica vagin-

[illegible], whereby its cavity is obliterated, and

[illegible] accumulation of fluid rendered impos-

[illegible]. This is an invariable remedy, many affec-

[illegible] deformities as the mere [illegible]

[illegible]

dilapidated nose [illegible].

[illegible]

[illegible];

[illegible] to set up some [illegible]

instance such as [illegible].

[illegible] is that [illegible]

[illegible]

treatment of [illegible]

[illegible] in every respect a high

interest, with a prospect [illegible]

[illegible]. No definition, or general description,

[illegible] made to embrace all the [illegible]

[illegible] which inflammation presents [illegible].

[illegible] first become acquainted [illegible]

with its symptoms, and as it displays

[illegible].

[illegible]

[illegible] they exist together

[illegible] positive part,

[illegible]

[illegible] — [illegible] :

[illegible] any one [illegible]

their combination with [illegible]

[illegible] of inflammation [illegible]

[illegible] from distension. The [illegible]

[illegible] The breast may be swelled

[illegible] of milk. To determine how far each

[illegible] symptoms is to be consider[illegible]

[illegible]

[illegible]

[illegible] presents itself will be [illegible]

[illegible]

[illegible] time a sense of pain is felt in
[illegible] which is soon succeeded by
heat and swelling, the swelling increa
the skin loses its natural color, and be
comes of a bright red. In the immediate
[illegible]
[illegible] and hard, and exquisitely tender: whi
[illegible] lets at some distance are soft and indist
[illegible]
ing pain, and the part is sensibly
[illegible]
shows that inflammation
the part. If it reach
[illegible] sily, other signs of disorder pre-

at a distance [illegible]

[illegible] succeeded by [illegible]

[illegible] dry and parched lassitude [illegible]

[illegible] white, parched mouth, great thirst and [illegible]

various [illegible]

He is unapt for any mental [illegible]

[illegible] unable or unwilling to exe[illegible]

[illegible]

manifests itself throughout the [illegible]

term; during which [illegible]

[illegible] mulous [illegible]. But we [illegible]

[illegible] employed for subduing [illegible]

[illegible]

[illegible] gain

[illegible] finish, the heat decline, and the [illegible]

[illegible] usual functions and natural appearance.

A disease which is the [illegible]

[illegible]

[illegible] remains a cause [illegible]

original severity of

[illegible]

[illegible] Then the above described symptoms

[illegible]

length begins to assume a more [illegible]

more pointed form, a white color is observed

[illegible]

its former density and becomes soft; there

is throbbing pain in the part: a pulsative

sensation, synchronous with the action

[illegible]

[illegible]

it: [illegible]

[illegible] thick purulent matter

and upon its escape there is generally a

considerable and speedy abate
the symptoms of inflammation — by
winding thus it is called suppuration.
which may cause the [illegible]
excitement to undergo a change, especially if
the [illegible] be [illegible]
[illegible] of pus [illegible]
[illegible] of the [illegible]
[illegible] and
[illegible] by [illegible]
and its [illegible]. If the [illegible]
[illegible] the [illegible]
[illegible] which [illegible]
[illegible] by the violence of the disease: [illegible]
[illegible] as set up. In that case [illegible]
color of inflammation alters to a [illegible]

[illegible] or even [illegible].

[illegible] tension of the [illegible]

[illegible] ceases the part is devoid of [illegible]

[illegible] is dead and putrid, and emits a peculiar and offensive odour. Typhoid fever may now set in when [illegible] is extensive, then a corresponding and [illegible]acteristic change is again observable in the constitutional febrile disturbance. The [illegible]; he has involuntary startings of the [illegible]; tremulous; his lips are black an[illegible]

[illegible] appearing to be conscious that they do so, and death closes the scene. Under more favorable [illegible] the living, and leaves a breach of surface. [illegible] separate notice.

[illegible] tributed partly to a stretching of the [illegible] by the distended blood vessels, partly to a [illegible] of sensation, accompanying the

tion present, preceding the exsten

inflammation varies much in different
cases both in degree and in kind.

cæteris paribus

ent persons. It varies from the slightest

[illegible] Parts endowed with little
[illegible] sensibility when sound become often
[illegible] intirely sensible under inflammation.
It differs in its character and intensity
according to the cause producing it, and
the part which is affected. Thus it is a

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] mation can escape readily, th[illegible]

are confined; — and comparative [illegible]

[illegible]

[illegible]

[illegible]

stated — such parts as have little [illegible]

bility in health. It is also in [illegible]

[illegible]

with the exception of Gout.

[illegible] at a distance from

[illegible]:

[illegible] first symptom of inflamed [illegible]

pain in the knee of diseased [illegible]

[illegible]

[illegible], and merely produces [illegible]

[illegible] adhesions are often found [illegible]

[illegible]

[illegible]

[illegible] is [illegible]

[illegible] parts. Sometimes the pain is [illegible]

[illegible] and uniform. Sometimes

[illegible]

[illegible]

[illegible]colic. It is important to [illegible]

[illegible]

[illegible]

[illegible] the affected part. [illegible]

The pain in inflammation by pressure

[illegible]

[illegible] not. Thus,

[illegible] abdomen may result from colic, or spasm

[illegible] a distension of the intestines by pain,

[illegible]

[illegible]

[illegible]

[illegible] to cause the severest pain and do
[illegible]ire. But the suddenness with which
[illegible] a great only of the sudden [illegible]
[illegible]
[illegible]at pressure made gradually
[illegible] unit
[illegible]ommotion [illegible]
[illegible]e pain. It is important to bear
[illegible]nd: especially when the existence
[illegible]
[illegible]

[illegible]

[illegible] the

stupor or coma. So also, if the nerves

[illegible]

and the [illegible]

Limbs in a state of palsy are often des

tituté of sensibility also; and inflammation

[illegible]

[illegible]

[illegible] is generally described as being

[illegible]

not so much increased as the sensation

[illegible] the patient on his heightened sensibi

[illegible] would lead him to suppose it to be.

[illegible]

the temperature as it exists in my [illegible]. The surface of the body, in its natural state, is not quite [illegible] so that the contrast between an inflamed [illegible] greater in the extremities than in the trunk. The increase of heat is [illegible].

heat, and therefore

[illegible]

takes place between oxygen and

[illegible]

rogen; the tissues themselves undergoing

[illegible]

natural condition of the body, below

[illegible] are necessary to health. Heat alone

neither constitutes nor implies inflamma-

tion: for parts may be made preternaturally

[illegible]

and exercise while there is no inflammation.

[illegible]

is [illegible]

[illegible] another.

[illegible]

[illegible] general [illegible].
Sometimes the increase [illegible]
slight, and may be overlooked [illegible]
[illegible] inflammation,
[illegible]
into suppuration. The heat is often
concealed from the observation of the
physician, by the situation of [illegible]
[illegible]
[illegible]
[illegible]
in the susceptibility of common sensation
[illegible]
[illegible]
patient. The redness [illegible]

[illegible]

[illegible] turned just so that the smallest [illegible]

[illegible]

and rendered visible to the naked eye.

[illegible]

Those vessels which naturally carry red

blood, red blood enters too into vessels

which are [illegible]

[illegible]

only, or which naturally admit sparsely

of the red particles, [illegible] their [illegible]

ity, and the quickness of their motion,

[illegible] cannot be seen. There is a great vari

ety in the limit of the redness of in

[illegible]

[illegible] degree, and on the nature of the

[illegible] affected [illegible]

[illegible] stages of inflammation. Sometimes the redness is dark, or livid or purplish [illegible] or sluggish form of inflammation. It is [illegible] a tendency to gangrene. Sometimes the [illegible] bubbles; and sometimes it is diffused, in [illegible] redness may and often does, remain after the inflammation has ceased. It is also

supposed that redness accompanies
inflammation of internal parts. While redness
[illegible] is seldom absent, even though the other
[illegible]
parts, in some degree upon the distension
of the [illegible]
[illegible] as much as does proceed from it occu-
[illegible] tissues. [illegible]
[illegible] the whole of the swelling, results
[illegible] the interstices of the affected part.
These effused matters are of very different
[illegible]

of the same liquid the blood. The degree of swelling in different cases depends partly on the intensity of the inflammation, partly on the [illegible] of the part or structure affected. Generally speaking, [illegible] where there is most swelling there is most pain. Swelling [illegible] inflammation. [illegible] simple anasarcous enlargements [illegible] occur [illegible] swelling that have no necessary connection [illegible] inflammation. On the other hand inflammation may [illegible] appreciable swelling. Inflammation [illegible] may be present without any swelling

Buffy coat of the blood

[illegible] remarkable and important circumstance which is not often absent in cases of in[illegible] upper surface of the coagulum parts with coloring matter; so that upon the deep[illegible] a clot there is to be seen a layer of [illegible], or sometimes of a bluish white [illegible] varying in thickness from a line

[illegible]

The uppermost whitish layer of the coagulum is the buffy coat of the blood. Sometimes the surface of the buffy coat is flat and even; and often [illegible] and concave_ i,e,_ the diameter of the buffy [illegible] is less than the diameter of the [illegible] .. Accordingly the blood is said to be both cupped and buffed. The formation of the buffy coat appears to be favored by many circumstances which have nothing to do with the disease under which the person may be labouring; such as the [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

in certain conditions of the system; and

[illegible] specially to the [illegible]

inflammation, that blood having the buffy

coat upon it is often spoken of as inflamma-

tory [illegible] with inflamed

blood. [illegible]

inflammatory [illegible] [illegible]

blood; and buffy blood sometimes occurs

without inflammation. The fact is,

however upon the whole a very valuable index

of the nature of many cases of disease, and

an important guide in [illegible]

Various and great has been the

speculation among pathologists as to the [illegible]

to with its formation, that the red globules, leaving the colourless fibrin before [illegible]

occasion [illegible] is not to be explained upon that principle. If it were, then it would follow that [illegible]

decided would be the buffy crust and it used to be supposed that this was

the true explanation of the phenomenon.

[illegible]

[illegible] unusually rapid. Dr. Davy and Mr. Gulvin [illegible]

The subject, that the coagulation of the blood [illegible] completed, than that of healthy blood. But [illegible] observations made and published on this [illegible] have settled this question. He [illegible] the appearance of the blood in twenty-[illegible] presented itself; in twelve it did not. Now in three of these twelve, the coagulation

of the blood did not [illegible] away
to forty minutes. After it was drawn out
in four others there was no coagulation in
[illegible] minutes. So that there was
[illegible] and subsided.
2. On the other hand, in twelve
[illegible] cases in which the blood was
[illegible] coagulation took place
[illegible]
fourteen minutes. The slowness of the
[illegible]
doubtless does favor the subsidence of the red
particles [illegible]
subside cannot be regarded as the cause
[illegible]

[illegible]

vital change in the blood appears probably from this — that it will sometimes vary greatly in different portions [illegible] at the same bleeding. Thus if the blood be received into four different cups in succession, it will [illegible] cent in none of the others; or it will be buffy in [illegible] buff. There are three forms presented by [illegible] is cut [illegible]. There is a complete separation of the [illegible], and a strong aggregation of the

[illegible] of the [illegible], themselves. The red portions of the coagulum is also, in [illegible] [illegible] [illegible] separated from the sides of the [illegible], and floating, generally, in transparent serum.

This is usually seen when the inflammation is violent; when it occurs in strong and [illegible] constitutions; and [illegible] has its seat in certain tissues, in fibrous and serous parts especially. [illegible] the whole coagulum is large [illegible] of the figure of the [illegible] it is not so much collected into a [illegible] and the buffy coat [illegible] broken. Here there is an imperfect separation of the coloring matter from

the fibrin, and no great aggregation of the
[illegible] [illegible] [illegible] [illegible]
mation) buffy blood is apt to accompany
[illegible] certain inflammation. In the
third form, the buffy coat is thick and
abundant, but is flat and soft, loose
and flabby like paste: and the coagulum
often adheres by its edges to the vessel in
which the blood has been received. This
has been considered [illegible] [illegible] and
but slight aggregation. The serum is
apt to contain a few red particles dis-
tinct from the clot. Such blood is dark
& very sizy. Some authors state that when
it is observed some other cause of general
disorder of the system usually be met with

to local inflammation. It is a curious fact that [illegible] drawn up [illegible] exhibit the buffy coat. It [illegible] appears upon blood drawn by cupping glasses. Arterial blood is liable to the buffy coat. Blood is more [illegible] when it is made to flow in a full stream, and when it is received in a deep narrow vessel. On the other hand blood drawn slowly, and received into a large vessel appears slow to form the buffy coat. The buffy coat [illegible] upon blood drawn at the [illegible] of inflammation. Buffy coat is not confined to cases of inflammation alone. The blood of plethoric persons and

pregnant women is often found to present the buffy coat. Buffy blood is no necessary measure of the danger of the disease. Neither is the appearance of buff on the clot, taken by itself, a sufficient warrant for abstinence, or more.

Terminations. Inflammation has only one general termination, viz. resolution, or recovery: the inflammatory action subsides, and the part returns to its former state — but, besides resolution, it may have either of the following terminations or effects, or consequences, as they ought rather to be called. 1st Hemorrhage; an escape of blood from the distended vessels. 2nd Effusion of serum 3rd Effusion of fibrin

or coagulable lymph, constituting adhesion 4th suppuration, the formation of a peculiar fluid called pus, closely allied with which is the change called ramollissement or softening 5th ulceration the disappearance or removal of the inflamed part. 6th mortification, or its death.

Theories of inflammation.

Many theories of inflammation, have been proposed; many attempts, have been made to explain the precise nature of inflammatory action. But inflammation is a function peculiar to life, it is on par with secretion and absorption; and if we cannot unfold the nature of the healthy vital functions, it is not surprising that pathologists

have failed in explaining those which occur in disease. It is pretty well agreed that inflammation is a morbid action of capillary vessels. This portion of the great circulating system appears to act a very important part in almost all the operations of the animal body. The capillaries are probably the parts concerned in secretion and the growth of the parts, and possibly also in absorption: but the whole subject of the functions of the capillary system is exceedingly obscure. Bichat appears to have considered it as altogether beyond our reach. Influenced by these considerations, Gerson and in authority, it has been attempted to ascertain accurately the state of the capillaries,

during inflammation. All are agreed, that under such circumstances the blood-vessels of the part carry an increased, or unusual proportion of blood, but some attach to this the notion of an increased action of their coats; others imagine, that in some part at least of their course, there is a spasmodic contraction; while other physiologists pathologists maintain that during inflammation, the action of the capillary vessels are diminished. Into the merits of these theories I have no intention to enter, after the opinion which I have expressed as to the utmost importance, even in the subject. The theory of increased action of the capillaries is upon the [illegible]

[illegible] is [illegible] [illegible]
as a guide in practice; and, though by
no means free from objection, will with
these reservations, be employed hereafter
whenever the nature of the subject may
lead to theoretical discussion.

In the common theories of inflammation,
everything is attributed to the agen-
cy of the blood-vessels. It is a question
deserving of some inquiry, how far
the nerves are concerned in inflammatory
action. Several circumstances lead to the opinion
that a buffy state of the blood is [illegible]
[illegible] depending upon [illegible] inflammation
but it would be out of place to enter upon
the consideration of such an obscure and

difficult question here. Nor do these comprise the only points concerning inflammation on which pathology is [illegible]. A doubt has been expressed, whether differences of mechanical structure are sufficient to explain all the variations which we observe in inflammatory action. It has been suggested, that there may be differences in the nature of inflammatory action; that the same set of vessels may at one time be in a state of phlegmonous and at another erysipelatous or rheumatic inflammation. This requirement however appears to be unnecessary. The above theory is according to Gregory verified by Fuller ——. Various other

theories have been put forth by the re-
searchers. Some attribute it to an acci-
dity of the blood;— others to an over-coci, that
is an obstruction of the capillaries, by
entrance of globules too large to pass
through them. Cullen supposed that it
consisted in spasm of the extreme ves-
sels. Hunter ascribed it to an increased
action. Wilson Philip and Hastings and
bility:— Hence to apoplexy; and, Earle
to an obstruction of the capillaries.
Dr Macartney considers that the im-
mediate cause of inflammation is a sense
of injury felt by the organic nerves; and
shows that inflammation after an in-
ry may often be prevented by soothing

and allaying [illegible] irritation,
and inducing a comfortable [illegible].
Mr Wharton Jones, believe that the
red globules have an innate attra-
tion for each other, and for the tissues
of the capillaries, Now must we omit to
mention Liebig's theory, that there is an
unusual rapid union of the tissues of
the inflamed part, with the oxygen
carried by the arterial blood. But so
far as we are able to judge, [illegible]
has made one step towards the solution of
the mystery by considering inflamma-
tion merely, as one mode of deviation
from healthy nutrition, and [illegible]
in what respect it differs from the [illegible]

in health. He shows that as in health the fibrous [illegible] [illegible] the capillaries [illegible] the [illegible] tissues, [illegible] for the formation of cells which may be developed into bone, muscles &c:— So in inflammation the fibrous [illegible] which [illegible] form the [illegible] capillaries, [illegible] blastema or formative fluid for the development of morbid cells;— in most cases the [illegible] cells, which are found in parenchymatous organs when hepatized;— in others the plastic cells found in the adhesive matter;— in others, pus corpuscles; others again, the [illegible] cells of cancer and other morbid

growth. He considers inflammation [illegible]
[illegible] as only a part of one great [illegible]
[illegible]tion which may be called abnormal
nutrition; and more especially that species
of it which depends on increased supply
flow of liquor sanguinus; and shows
that what [illegible] considered the essential
[illegible]toms of inflammation, viz, heat, pain,
[illegible] and [illegible] [illegible]
[illegible] the exudation, partly of the [illegible]
[illegible] which precedes it. With regard to
the processes that actually [illegible]
[illegible] part, many statements have been
promulgated that appear to be totally con-
trary to facts, and to have arisen from mid-
lined microscopical experiments. It [illegible]

known that the application [illegible]
[illegible] the pia mater
may be seen to become dilated and loaded
with blood, and [illegible]
and at last coagulates and becomes still, and
it has been concluded that these phenom-
ena are inflammatory, and consequently
that the retardation of the circulation is
essential element of inflammation.
In [illegible] [illegible]
ing, that this coagulation is merely the
[illegible] effect of the [illegible] and other
irritating matters employed to create the
so called inflammation; and besides
[illegible] liver, intestines, and other

late authors of good credit affirm most positively that it is impossible [illegible] inflammation in so called cold blooded animals at all. The facts that are first established are the following:- That in the capillaries of an inflamed part, and the larger vessels in its vicinity, the blood is circulated with preternatural rapidity, and in slower; - that this vascular excitement is followed by exudation of serum or lymph through the capillaries into the interstices of the part; or perhaps by the rupture of the capillaries and extravasation of blood; that subsequently, in the focus of the inflammation the blood stagnates

and the red globules adhere to each other,
and [illegible] is the inflammation continue, the tissues become completely broken down and disorganized at the points where the inflammation is most intense, and that pus is formed out of the exuded lymph; or if the inflammation increase in severity, the [illegible] cease to circulate in the vessels, the tissues become soft and flaccid, and in fact mortifies

Treatment of inflammation — acute

In the treatment of acute inflammation and its attendant fever the indications are, to reduce the increased action of the heart and arteries; to allay pain and uneasiness

excitement, and to restore the secretion. [illegible]
this [illegible] va[illegible]
narcotics anodynes. The first and most
important [illegible]
should never be carried so far as to produce
syncope, or fainting, but only far enough
to produce a perceptible change in
[illegible] action. Now it required to be
understood, that this suspension of
depends upon two causes: first on
the action of its natural stimulus, the blood,
secondly, and principally, on a peculiar subtile
influence transmitted to it from the brain,
[illegible] the latter does not receive its due
supply [illegible] blood. [illegible]
[illegible] more [illegible] of blood. Per se [illegible] service

—slow the blood is morbidly [illegible]—

in [illegible]

[illegible]

[illegible] effects of bleeding in inflammation depend

[illegible] on its sedative effects upon the [illegible]

[illegible] the [illegible]

would it be necessary to bleed a debilitated

patient the sedative effect should be produced with

[illegible]

Manner of bleeding. For this purpose

the blood should be drawn from a large

vein, and [illegible] the patient should be

[illegible] upright. [illegible] the blood is drawn

slowly, so that the vessels have time to adapt

themselves to their diminished contents.

[illegible]

Quantity to be taken. As a general rule the blood should be taken to syncope, or even to paleness of the lips lividity about the eyes sinking, [illegible] of the pulse, [illegible] and pale syncope [illegible] tolerance of bleeding without pain. [illegible] according to the age, sex, and temperament of the patient. It is [illegible] young and old than in the middle-aged. In [illegible] and [illegible] than in the sanguineous [illegible]

[illegible] tolerance is [illegible]

[illegible] by the exciting disease. The diseases in which bleeding is best borne are inflammations of the heart, and of other vital parts. Also [illegible]

[illegible] venesection is not to be resorted to [illegible] in case of acute inflammation. There are three [illegible] to be considered: viz. First, the patient [illegible] Second, the [illegible] Third, the [illegible] the injury or exciting cause which has produced the disease. Evacuants sedatives. under this may be included a number of antiphlogistic remedies which [illegible] either by increasing certain secretions, or by

a specific lowering agency independent of any evacuations, — most of them being capable of being in [illegible]. The [illegible] at the commencement of all cases, except where they would [illegible] disease or injured part, [illegible] wounds of the alimentary canal, and in [illegible]. These should be [illegible] excite free secretion from the liver and intestines and evacuate them rapidly: such as calomel, [illegible] and [illegible] laxatives. [illegible] — [illegible] spoken of by many [illegible] but does not at all times produce the desired [illegible] — nevertheless it is spoken of by [illegible] authorities and we use their remedies [illegible] — [illegible] increase the bowels [illegible]

the secretions, and excites the absorption of
morbid products; it is chiefly advantageous
in idiopathic inflammations of serous mem-
branes, with a tendency to adhesions. In
the nature of the disease and the state of the
pulse demands bloodletting, mercury cannot
be regarded as a substitute, but only as an
auxiliary; and if employed to the neglect
of bloodletting, will most likely do more
harm than good. The best form for
administering it is in the calomel powders
of which one to five grains may be given
at intervals from four to six hours, until
slight affection of the gums is produced:
but all violent salivation should be avoided
as it is a great evil. The calomel should
be combined with opium [illegible]

prevent it purging too freely. Antimony is another direct antiphlogistic; it may be administered in doses of ⅛ to ½ grain, with each dose of calomel and opium; in larger doses such as two grains it is a most potent remedy especially in pneumonia; it does not cause vomiting after the first few doses but exerts its sedative influence without producing an evacuation. Lobelia is a remedy of precisely the same character; it is most useful in gouty and rheumatic affections. It may and does frequently produce bilious stools; but it is a helper rather than a hinderer and they are indispensible to its good effect. Nitre and other salines may also be given with great advantage, the above has and thirst, purging the bowels, and increases

the secretion of the skin. Sedatives not narcotics, these remedies reduce fever and inflammation by action on the nervous system, without increasing the secretions; they are aconite, conium and digitalis, the two first of which in particular are of eminent service, when combined with calomel and antimony to prevent suction and soothe pain in cases attended with great nervous debility. Narcotic, opium primarily decreases the secretions, and increases tissue excitement; hence it must not be given in acute inflammation till after bleeding; but then a large dose two grains may be given with grain of calomel to prevent suction. But it is the sine qua non, and may be given in afterwards occurring in debilitated habits, such as peritonitis from perforation of the intestine after fever; or

acute inflammation [illegible]
hemorrhage. The warm bath acts in every
manner, and to often [illegible] and [illegible] the
same precautions: viz, as it stimulates [illegible]
it soothes, it must be prevented by cover-
lions if the patient be feeble. The proper
temperature is 97° Far. and it should be
continued long enough to produce relax-
ation. **Diet.** The diet in acute inflam-
mation should, as a general rule, be of
the least stimulating nature. But although
light food as gruel and tea might for
days suffice for the robust and plethoric
this starving system must not be applied
to children, i.e. to the old or debilitated, on
the contrary, their strength must be sup-
ported by good nourishing diet, as beefsteak

wine, whey and other stimulants if necessary.

Regimen. There must be a total avoidance of every thing that would irritate mind or body. Perfect rest in the recumbent position and in a position as easy as it can be made - cool air - free ventilation - the exclusion of light and sound - with mental consolation to allay doubts and fears, and in fine resignation and cheerfulness are most potent aids to medical treatment, which without them would, as is always possible.

Local treatment. The first thing to be done is to remove all exciting causes, if possible, and to place the part at perfect rest and in a certain position so as to favor the return of good health, and [illegible] to diminish the morbid heat and action

a liver and lowers [illegible]

[illegible]

cupping and scarification. They

[illegible]

and if they will not stick, apply milk-lead

to puncture with a blunted [illegible]

be dried [illegible]. [illegible] removing

[illegible] dissipated, are fine Brass or finely sharpened

pencil of lunar caustic. The [illegible]

[illegible] [illegible]

[illegible]. If they remain [illegible] [illegible]

with salt, never to be removed forcibly, and

they should [illegible] [illegible]

or their bites might be followed oedema, even

[illegible]. Cupping, when [illegible] [illegible]

more active measure and relieves pain sooner

than leeching. Scarification or incisions are of

use when inflamed parts are covered [illegible]
[illegible] [illegible]
is great tension as in phlegmonous erysipelas,
or when the inflamed part is infiltrated with
[illegible] fluid; as in extravasation of urine, or
with unhealthy matters as in carbuncle.
Cold [illegible]
and to cause contraction of capillaries, but they
should be applied [illegible] [illegible] [illegible]
pain will be [illegible] [illegible] [illegible]
Wet cold baths perhaps best, for they do not stim-
ulate like heat, nor cause painful reaction
like cold, and are more directly sedative than
either. Warm fomentations are useful by
relaxing the skin, soothing pain and promoting
[illegible],
[illegible] [illegible]
[illegible] [illegible] of dense tendinous parts. But in

may ease the patients feeling [illegible]
[illegible] according
to his choice. Stimulants, and astrin, ent
Solutions are of great service in inflammations
of mucous membranes, by decomposing, and
washing away their irritating [illegible],
and giving contraction of their capillaries
[illegible] irritants; Blisters are the best form
of them in recent inflammation, but they
should never be applied to near the seat of
[illegible] has been previously by antiphlogistic
measures.

Chronic inflammation

Inflammation is chronic when it is slow in
its progress, and tends to last long or indefinitely
its consequences may be activity, thickening

inflammation, ulceration, or suppuration. Its causes may be constitutional or local.

Treatment. Inflammation [illegible] constitutional diseases [illegible] and to restore the tone of the distended vessels. The remedies known to be [illegible] Mercury, or general treatment. If the patient is bloated and plethoric, and indulges freely in strong food and drink, and has unimpaired digestive organs, [illegible] constitution formed in [illegible] diet must be lowered and restricted chiefly to vegetable substances; free exercise should be taken in the open air, and then a course of alterative medicine should be commenced in order to increase the secretion and [illegible] system of its superabundance of material.

with saline aperients in the morning, as
is before mentioned, Plummers pill at
night in five grain doses. It may be necess-
ary to bring system under its influence
slightly. Not to increase bowels
in small doses Rhubarb is most deserving,
Aloes, may combine with mercury,
But if chronic inflammation occurs in
an enfeebled and irritable constitution, a
nutritious and liberal diet must be adopted;
wine and tonics should be administered;
in order to improve the digestion and vigor
of the circulation; irritation must
be allayed by anodyne and should
the secretion of the bowels be preserved
by the gentlest laxatives.

[illegible] red and red at its tip and edges, and there are heart-burn flatulence, pain at the [illegible] of the [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] consist of the plainest and most [illegible] articles, and small doses of alkalies may be given [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] them bowels to be kept open by some aperient medicine; when there are signs of [illegible] of the [illegible] [illegible] [illegible] of blue pill, with morning aperients. When tonics are administered it is always necessary to [illegible] a [illegible] [illegible] of the [illegible] otherwise headache and feverishness will [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] be [illegible] by [illegible] [illegible] of iron [illegible] [illegible] [illegible] [illegible]

emmenagogues if necessary. Of the alteratives [illegible] intermittent, [illegible] more [illegible] combination with tonics, sedatives, antiseptics, iodine or iron, as circumstances may direct. [illegible] ale, and the liquor arsenicalis are also useful in certain cases, but they should be employed with great caution and care.

Good [illegible] in all [illegible] distended vessels and make them contract [illegible]

[illegible] cise the part in its proper function [illegible]

[illegible] tions and sensations of the [illegible].

Real bleeding must be con[illegible] [illegible] the vessel [illegible] by various stimulants and astrin[illegible]gents: such as the sulphate of iron, copper and alum, nitrate of silver, salts of mercury &c. Counter irritations, are [illegible] in [illegible] inflammation [illegible] in the acute especially those which establish a permanent suppu[illegible] [illegible].

With these imperfect remarks, I leave the subject for abler minds to resume.

George D. Bret

1868

AN

Inaugural Dissertation

ON

Alcohol Its Use & Abuse

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Lee Scott

Of

Missouri

Session of 18

Alcohol
Its Uses and Abuses

Gentlemen.

In selecting this subject, I am perfectly well aware of the almost endless number of arguments, which have been offered — yet when we look over the statistics, as produced by Dr. Todd, and others, of the many, very many cures which have been effected, I am satisfied of this powerful — both for good and evil — remedy, it follows with astonishment. It will not be for Temperance — exposition

young ones — to branch out in life without any set principle, either "pro or con", regarding the use of "drugs". When in the treatment of "Disease", he should find that the powers of life are gradually sinking, beyond a point, stimulants must be resorted to, in order that we may accomplish that great end, for which "Physicians" were placed here viz "Natures Assistants."

From the manner which many have spoken, and written, we would imagine, that we are not the "assistants", but the

prime movers of all in which is good, and to our own judgement is due the grand and good results which might follow the application of remedies.
In speaking of "Alcohol" I shall only do so under two heads as a "Medicine" and as a "Poison," in this I follow the late Prof. Beck of New York.
"A. a Medicine" — it is powerful, yet not by any means a panacea it can and does accomplish great results — In treatment of Low Fevers, it cannot conveniently be dispensed with — When the

poison is circulating through the system, lowering the action of the Heart, and reducing the powers of the brain, wearing away the constitution, "Death" must be the result— unless we can keep the powers of life to such a standard, as will enable the constitution to battle with some hope of success, against this fell destroyer for this purpose we use "Alcohol"— Yet in Treating Fevers we find great difference of opinion, By some gentlemen— shining lights too of the profession— we find it

has been carried to an enormous extent; whilst by others it has been pronounced as vile and worthless — powerful reasons have been brought forward by both parties — many disciples following each; That the effect has produced upon the public mind regarding our profession as a science or experiment, I am unable to say — That opinion has been carried to an unwarrantable extent, on both sides, there can be no doubt.

Dr Beck looks upon Fever "neither as a disease of pure debility or

as resulting in local inflam-
-mation, and yet in the dif-
-ferent forms and stages of
it both these may be present"
When called to a case of Fever,
and find the patient laboring
under disordered secretion,
greatly increased action of
Heart and Arteries, heat of
Skin, and all the other phe-
-nomena attending the advent
of Fever — to use "Alcohol" in such
a case would be highly impro-
-per, and exceedingly dangerous
for myself I should positively
decline administering stim-

-ulants- be they what not-
under such circumstances.
Believing as I do, that I would
be held accountable for my
patients' life, not only by my
God but "The Profession."
It is for this reason that I say,
no young graduate should
start his professional career,
with set principles or dogmas
of either "Brunonians or Brown-
-sains, but trust to his judge-
ment and the opinions of
gentlemen most learned upon
such subjects.
Some Fevers do well - indeed

progress better if stimulants are not used at all, Intermittent and Remittent, which abound to such an extent in our own country, are proof-examples. I have seen in the "Hospital" attached to the "University of Maryland", good results from the slight and guarded use of "Alcohol", yet notwithstanding this I should be exceeding loth to depart from the use of "Quinine" and give the precedence to any article which might be brought forward and lauded

to the skin as a panacea.
There is a vast difference between
Remittent and Intermittent,
Typhus and Typhoid, in the
two last we can use Brandy
or Whisky, from their very
commencement, and in the
latter stages of both immense
quantities, especially when
there is great prostration — it
has been done successfully,
moderate doses will be borne
well, and produce results
which are truly wonderful,
rescuing the patient as it were
from the very jaws of death.

For the use of "Alcohol" in the low fevers we cannot lay down any rules with safety, for, this must be judged by the effect - if there is improvement continue the remedy - if none enlarge the dose.

Men of dissipated habits are much less liable to be brought under the influence of "Alcohol", than those that have lead temperate lives, the reason of this I am unable to say; yet to me it appears, that by the constant use of stimulants, the system becomes

in a manner accustomed to it, and will not reach to more than in ordinary standard, unless immense quantities are administered, for this reason drunkards very seldom recover from Typhus or Typhoid. Even when we have as our patient a strictly temperate man to deal with. "Alcohol" can be used to such an extent as to overdo its medicinal qualities, and become a Poison

"Dyspepsia" — "Illness arising from a disturbed condition

of the stomach, either com-
-bined with some disease of
minor importance, or with-
-out the presence of other dis-
-ease at all" — In this affection
"Alcohol" has been carried too
far, indeed the patients feel-
-ings, are of such a nature,
as to force him to the use of
Brandy, Wine or Whiskey, no
matter how much he may be
opposed to their use — The tem-
-porary energy which is imparted
to the stomach — the relief they
feel after having swallowed
this liquor, really induces him

to think, that it has an im-
-mense influence over their
disease, and it would be al-
-most impossible, for them
to do without it — In this man-
-ner the habit becomes formed
and ultimately may end in
ruin, to mind, body, and hap-
-piness for this reason — I mean
the dread results — we should
be cautious how we use it —
If we are to implant the seeds
of disease in a man, which
may eventually prove his wreck —
in order that we may conqu-
-or some other, which might

have been overcome by other remedies, we are indeed culpable, and lay ourselves open to censure, from all honest minded men — Yet I would not say it should not be employed, that would be foolish, but when it is used, and we find that our patient no longer regards it as a medicine, but looks forward to its repetition as a pleasant drink only, when he can again enjoy that delightful state, in which the mind becomes exalted, and wings its way through life

delightful paths of fancy — It should be stopped, and some other in the long catalogue be substituted, in this manner we can counteract the first impressions, which if continued, will surely prove a harder matter to handle, than the original — at least more to be dreaded that its predecessor. Dyspepsia never yet I presume caused the loss of a soul, but "Alcohol" most undoubtedly has, many are the physicians that have been the cause — Indeed so mixed is dyspepsia i.e.

other organs, we find great difficulty in telling which cavity was the first affected — It may be caused by affections of either bowels or liver — our remedies therefore should not be directed to any particular organ, but be directed in such a manner, as to operate upon both stomach and liver — in this manner, we may counteract in them all and produce results of the most satisfactory nature. "Alcohol" should be used only in simple debility of the stomach and intestines

(Prof Best), Were I to enumerate all the diseases in which "Alcohol" could be used with advantage, I should be imposing upon myself a task, which would almost be endless; besides placing myself in a labyrinth, from which it would be impossible to extricate myself— I could not tell in what manner it acted, I only know it would be of immense benefit and that would be all. I am not speaking of how it acts, but of its "Uses and Abuse" consequently my task is not

diseases in which it has proved useful, neither in what manner it acted.

There can be no doubt, but that the first stages of intoxication are truly delightful — the mind is free from all care and trou-ble, one feels as if Heaven itself was open to him, and he enjoys all the pleasures of the "gods" in imagination — if the man has any — but full gravy, the second stage is not so delightful — the mind becomes cloudy, wandering never remaining steady for any length of time upon one sub-

-jects the head is giddy - Everything appears double - tongue thicks, and general debility finally sleep - This stage of intoxication comes on almost imperceptibly, and ere the man is aware of it, he is in the most beastly stage of drunkedness. During convalescence, if we continue in the use of "Alcohol", dissipated habits are exceedingly likely to follow, afterwards having contracted the habit, it is hard indeed to stop it, for this reason therefore, we should substitute some other and less

our patients from the path of ruin, in doing this, we not only become benefactors of society as professional men, but their benefactors as moralists. After disease has been conquered we can withdraw Wine, and substitute, Ginger Chamomile, Calamus, indeed a dozen things which will act almost as well, and leave no bad habits behind, family happiness in this manner can be preserved, and we, have the sweet consolations of knowing, that to ourselves is due all

the credit of this mighty achievement.

If the bad effects of "Alcohol" it would be useless to speak, we see it everywhere upon the streets of this City — their name is "Legion" — Yet it would be well, to mention, what we may expect, if he follows closely the laws laid down, by men, whose meat and drink has been dissipation — It has been said, and I believe it, that there are men in the world that when free from artificial stimulants, are the most stupid creatures,

that can be imagined - In order therefore to render themselves agreeable and fascinating, some-thing must be taken, which will stimulate, and urge them on to attain some end; at least to attain the end they desire - Above all things one should bear in mind, that if he or she, has no an imagination to stimulate, they had better not use it, for if it does not act in one way, and render them brilliant, it acts in another and renders them more stupid than before - If God did not intend

that a man should have an imagination, which could be brought to such a point, as to impress all, with the reality of his thoughts, all the students in the world would not, but quite the contrary, consider him perfectly ridiculous — The old adage of "Poeta nascitur non fit" should still be well people practice upon it.

"Delirium Tremens" — which follows, if the use of "Alcohol" is carried to great excess, is one of the most terrible rights to be upon which can be imagined.

deaths, and millions of filthy reptiles crowded upon the disordered vision, the poor mortal with eyes protruding, rushes from room to room in the vain effort to escape from fancied injury — Every hue & turns, there still are the dreaded creatures — Men with evil intent are pictured by his frenzied brain — With wild and terrific shriek he crouches in some corner, perspiration dripping in large drops from his grey head — He calls loudly for help, implores those who may

be powerful to save him from the fiend's who is only waiting to drag him down, and place him among the "lost" — sleep is impossible — What then can be done? Unless the system can be quieted, Death must inevitably follow — Opium is recommended, Brandy, or some strong drink similar in its action, in such cases will be found very advisable — The system is debilitated which if allowed to go on and the patient not sleep — will be exhausted and then comes that long long

sleep from which there is no
awakening.

Yet, notwithstanding all the
suffering through which one
has to pass, so soon as they recover
from one attack back again
they fly to old haunts, companions
and habits; still following the
same course which will eventu-
-ally put an end to their existence
Men who have once formed
the habit seldom if ever abandon
it. It is a habit strong even to the
last — all remonstrances, all in-
-fluences, be it ever so powerful
has no effect, down they sink

till death claims him for his own, a man which might have filled the world, now disgraced and buried beneath the sod "unwept unhonored and unsung."

"Nowhere on the globe be man savage or civilized can we not find some substance which exerts this baneful influence over man — No matter how timid a man may be "Alcohol" has the effect of making out of that bashful shrinking creature, a man with some slight courage. "Apoplexy" — is also one of the results — One little knows when he

is to be stricken down with either Mania or Apoplexy — It comes stealthily like a thief in the night — The first intimation we have of its presence, we are in its power — it is too late has one to think — In Mania comes the force of imagination — It is indeed urged to its highest power — The long wished for fancy has at last been obtained the mind conjures everything which is horrible, and our partner is mad — There is no cure medicinally for this horrid and most unfortunate habit.

If any good end can be accom-
-plished it must be done by ap-
-pealing to the mind — all the med-
-icines in the world will not be
productive of a single good result
If the man is so thoroughly de-
-based as to be willing only to be
happy when under the influence
of artificial stimulants, then
must the case be abandoned
the disease is beyond medical
treatment, the Physician is no
longer required — the man is be-
-yond redemption — To contem-
-plate the terrible wreck which
man can make of himself is

fortified in the extreme-
"Alcohol" as a poison is in the
end-Deadly equally as much
so as any other named in the
"Materia-Medica"- It gives him
more time to correct it than is
allowed in poisoning by Hydro-
-cyanic Acid.- "Alcohol" is gen-
-erally slow- Yet in some instan-
-ces, it is quick and does its work
most thoroughly, such is the case
when men through a mistaken
ambition, wager that in such
a time they will accomplish such
an object- In such instances
"Coma" is sudden, face becoming

fainting, sometimes, feeble pulse, pupils dilated or contracted — If speedy relief is not rendered Death hurries the Patient into eternity — The Hemorrhage when the system has become very much debilitated, by constant loss of blood. "Alcohol" or some stimulant is absolutely required, to sustain the flagging powers of life — The Physician in such a case as well as in all others no matter what his opinions on the value of "Alcohol" maybe — even if his opinions are based on prejudice — is in duty bound to use it.

The physician is the man to heal the body of its ills. The patient with the assistance of the clergy will look after the welfare of his soul. Our business concerns only the mortal part of man. This conscientiously being opposed to the use of stimulants is carrying a certain principle to such an extreme as to endanger life. And all physicians who are guilty of this, most assuredly must be sacrificing a great and powerful remedy to conscience. What would Medicine be without its most powerful agents?

How could we hope to contend successfully with such diseases as infest our marshy countries, if it were not for Quinine? Bitters & Opium have rendered quiet a patient harassed and almost exhausted with pain and suffering — How we contemplate the folly which has so long been guilty of in absolutely rejecting this valuable — I might say a sovereign remedy we feel as if gross injustice is done, not only to profession but the patient.

Of course, gentlemen I am not expected to argue this

point with those who have made the subject of the study of a lifetime, yet our most learned Physicians and Surgeons all use "Alcohol." if then I can produce so many names of eminence in support of the position which I have taken, I not assuredly there must be a vast deal which cannot be refuted by the most powerful arguments advanced by the disciples of "Broussais" "That which has stood the test for years most certainly must be true — It is no longer an experiment but a certainty

It has been advanced, by philosophers, all of whom have their names high up in the temple of "Fame", that by treating disease with "Heat", we lay the foundations for dissipation — this may be true, by using "Cold" we may induce death, if carried too far. Yet could we cut it off altogether from practice and substitute anything else which would act as well? What would a surgeon do without it? Never have I met in my reading, where "Cold" in surgery or practice could be abandoned. Why then should surgeon

-ment after argument be adva-
-nced? Can it be possible to con-
-tradict an "Axiom"? It cannot
reverse that which is known to
be so and must in appearance
I fear object gentlemen in select-
-ing this subject was not to advance
anything in favor of the use of
"Alcohol" but to express my honest
convictions as to its utility.
All my reading has been of such
a nature as to convince me
that equally as many powerful
and in many instances much
more powerful reasons can be
produced in support of its use

-mense benefit. In my own practice - should I ever have one - I shall follow my own judgement in its use - When the system needs support, I shall most assuredly give it. In low fevers when the poison which has been circulating through the blood and my patient is in danger of losing that which is most dear to him "His life" I shall use "Alcohol", but not to the extent as to lead to alcoholic poisoning. In Hemmorhage when the system has been debilitated by expenditure of blood again should I use

its. No matter what has been said upon the subject, my patients life is to be my first object. In treating our patients we are bound in honor to do all for him which medicine can possibly allow, if we fail then do we know that we have done our duty both to the profession and our fellow man, thereby fulfilling the great object for which we were placed here.

Hoping gentlemen that these few desultory remarks may meet your approbation, and I be deemed worthy of graduation I have the honor to be

Your Obt Servt

Lee Scott

of

Missouri

AN

Inaugural Dissertation

ON

[illegible]

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Isaac C. Grimes

of

Maryland

Session of 1868

Cholera Infantum

This fatal disease - vulgarly known as summer complaint or mayday is almost indigenous to America & European authors give it no special notice; rarely cite it among cases of Gastro-intestinal Irritation or inflammation peculiar only to infants or rather to which infancy is subject. But in this country its fatality is so universally known & feared, that it has elicited

most astounding intrusion, both among the profession & people generally, all of whom concede that it justly merits a distinct designation. This fact is more fully corroborated upon observing that of the ills prevalent among infants the principal is the one herein alluded to. This trouble usually attacks children between the ages of three months & two years, though it is liable to accumulation

after their periods. It is exclusively a disease of the warm season & usually appears & disappears with it. Its favorite haunts are cities & densely populated places where it generally prevails with distinguishing malitte. Yet the country & less populated places are not exempt from its fearful ravages

Symptoms

Diarrhoea is frequently the usher of this disease

& sometimes precedes the cholera two or three days, yet at times the vomiting & purging commence simultaneously — In fatal cases of short duration the vomiting continues to the end. But when the disease is much protracted or terminates favorably it frequently subsides considerably or ceases entirely leaving only the diarrhoea behind. Occasionally the disease is exceedingly violent & rapid, the vomiting & purging

incessant, the stomach becoming so irritable, that it will not retain anything, swallowed even cold water or another palliative agents. The intervals are marked by great languor & prostration with more or less spasmodic pain of the stomach & bowels & if relief is not afforded the little sufferer soon relapses into a state of perfect insensibility, amounting at length to coma, with a cool & clammy skin, shrunken

Fortnight, half closed eyes with death in three or four days sometimes longer. more frequently however the attack is accompanied with symptoms of fever & the disease protracted to two or three weeks. From birth if the case, the patient was small & quite feverish the mouth is hot the tongue somewhat furred & the surface of the body alternating from one temperature to another,

while the extremities are cool.
The fever assumed rather the
remittent form & is more viol-
-ent in the evening. This generally
occasions delirium or stupor, in-
-dicating a morbid state of the
brain — The abdomen is not
always collapsed as we would
naturally suppose; but is sometimes
swollen & painful on pressure.
The vomiting often continues
inveterate until the close of
the attack but more frequently

cases having a diarrhoea which lasts for several weeks, & finally wears out the patient — During the attack the little patient emaciates rapidly, & the skin hangs loosely about it, particularly its neck & the whole surface is thin cool & clammy, as harsh & dry — When the disease runs a protracted course, other phenomena are presented — The tongue is dark colour, smooth & shining, & covered as well as the walls of the mouth with

aphtha — The fauces becoming dry, cause a sense of uneasiness; which often induces the infant suddenly to thrust its hands deep into its mouth as though to remove some offending body. In many protracted cases, an eruption of very minute vesicles, occurs upon the neck & breast. This phenomenon has been considered a "Catulence," but "Dr Watson" refutes this opinion & says he has seen the eruption in cases when

it had been the most intensive & distinct — At this stage if the patient had no relief, the emaciation progresses rapidly, & the little sufferer rolls his head from side to side, rolling constantly, short, plaintive cries — It falls at length into a state of complete coma, & death finally supervenes preceded by a convulsive attack.

The duration of this disease, is not have definite limit

of the attack frequently comes on so violently & suddenly, & the prostration so extreme, that life often becomes extinct within twenty-four hours. Generally however it is more protracted, sometimes lasting for days & weeks, & the patient gradually sinks from mere inanition.

The anatomical lesions observed by an autopsy of those who have died from "Colica Infantum" (if the disease was of short duration)

show a livid appearance of the alimentary canal & the liver more or less congested. The structure of the mucous membrane is also affected by a softening or thus coat, with enlargement of its follicles, attended with inflammation, & sometimes ulceration. The intestines are generally empty, with the exception of a small amount of thick tenacious mucus. The condition of the liver has been variously

described by different writers
upon this disease. Some speak
of it as being of a light yellow
or mottled color & abnormally large
while Dr Wood describes it
only as being enlarged & consisted.
The Gall-bladder contains a fluid
which is sometimes a dark green &
sometimes pale & nearly colorless
Cause
Cholera Infantum is evidently
a disease of caused by exposure
to heat, impure air & damp places.

of the atmosphere of cities at a time, from the patients predisposed to disease, by the effects of dentition, & from the increased development & activity of the mucipurous follicles which take place at that period — But I think it is perhaps clearly shown, that impure atmospheric vapors tend to be hence & transmitted, perhaps the principal cause of this malady, as it is recorded in our journals, by members of the profession

practicing in cities, & denser populated places than our State - that it seldom appears among the suburbs, but is generally rife in the interior lanes & alleys of their cities - where the population is thickest, & ventilation most imperfect - It is considered one of the greatest scourges of our cities - But there are other causes producing predisposition to this disease, among which, an impure food, foreign substa-

-ness in the stomach, some ven-
-dular expansions take place in the
skin it is a natural condition;
but these it may be said accord-
-ing to the writings of undistin-
-guished Fathers in the profession
(Drs Wood, Watson & others)
~~that~~ these are only slight adj-
-uvants to the disease, & only rarely
cause it unless assisted by the
cardinal causes which are heat,
debilitation & impure atmosphere.
Since children are generally

considered as having passed the
period of greatest danger when
this second summer is over —
The child is considered as having
a great influence upon the
origin of, or severity of this
disease from the fact that,
children fed with the spoon
or bottle, take it more readily &
dangerously than those nourished
at the breast —

Status

From all appearances upon

dilatation says Dr Good, it may be safely inferred to consist essentially in an irritation or inflammation of the mucous membrane directly especially to the mucous follicles, associated with a torpid or congested state of the liver probably depending upon the same cause.

Dr Robertson, Professor of Anatomy in the Medical University, denies any abnormal condition of the liver

"R
Nutmeg

In this discussion it is attempted
the first thing to be aimed at
is to remove the cause without
this the efforts to relieve the
air-child will be almost futile
In order to remove the cause the
filth must be removed to the
country or where we can have
pure atmosphere & ventilation
Unless this is done the most
judicious efforts of the practit-
ioner to relieve the sufferer
be almost entirely futile or at least

partially efficacious — The patient may appear to be improving, yet the disease will again return in a more malignant form than ever & another relapse appearing effected. Still another relapse may recur yet or until the power of vital resistance is so reduced as to render the system unable to make further resistance — Yet again in its protracted in this way until the return of cold weather when the infants

is rescued from the deadly grasp of the child is removed to a purer atmosphere & circulated freely in the open air either in the arms of a nurse or in a carriage, the happiness resulting is generally made manifest. In a air is also highly beneficial when it is acceptable — With a proper attention to diet & hygiene the child will almost always recover, or it is said, even without medicine or a very small quantity

at it - This has been the practice
of Dr Hood & he would have
one cure less to pass a strophin
than that in which it contracted
the complaint, in which this
treatment proved unsuccessful
But if the cure it of long stan-
-ding & the irritation had time
to run into inflammation, this
treatment would probably prove
less efficacious, yet it would
be well to not omit it - If in the
city the patient should it

practicable be carried into the open atmosphere & place where there can have free ventilation. The apartments in which the child continues should be warm aired & kept perfectly dry & clean — If the disease is attributable to or aggravated by dentition or should they exist together attention should be immediately directed to the gums & if they are turnid & inflamed with the perforating teeth perceptible to the touch they should be freely

Cancer. Should the inflammation of the gums extensive from the presence of scurvy with fever. Leeches may be applied to the chest & obstinate pleuro behind the ear. When the attack was brought on by simple diarrhoea a warm bath once or twice a day followed by gentle friction will prove efficacious. In conjunction with mucilaginous drinks a combination of one grain of Calomel & two grains of Ipecac

Exhaltr & a half grain of the
acetate of Lead, given every four
hours it also highly recommend
Attention should also be given
to the diet & dress of the patient
as regards in this particular it
often runs of the exciting cause
of this trouble - For food
of the infant should be the
mother milk or if she be dis-
-eased procure a healthy wet nurse
& this mild stained on the breast
during the existence of the

complaint — if this diet cannot be tried the best substitute for is a perfectly pure cow's milk diluted with water — Sago made from farinaceous substances such as Arrow root, Tapioca, rice water Crackers &c may be used. Wine should be known to be perfectly free from impurities —

All nutritive drinks should be given in small quantities so as not to irritate the stomach & the inclination the child

vinous & drink much by nature
in order to quench the thirst
which is so characteristic a
cold solution of Gum Arabic
or cold water in small draughts
is preferable to nutritious drinks
Crushed ice confined in a piece
of linen or gauze so that it can
not be swallowed undissolved is
of great benefit to the patient
When the disease had advanced
to a more critical stage & the patient
manifesting great debility of the

system. Some of the animal broths may be given & allowed to suck a piece of ham or dried salt beef it is done not in order the trouble of clothing should be such as to insure an equable temperature to the body without oppressing the child. Soft flannel should be worn & the feet & legs covered. The alimentary canal should be watched closely in order to remove all sources of irritation that may excite the mild laxative

Tannic acid should be given to promote hepatic secretion & relieve portal congestion. Calomel or some other alterative should be given. If the patient complains of great pain an anodyne should not be neglected. And to check rapid evacuations in the advanced stage astringents & a pleasant wine should be administered & the patient well supported with stimulants. When the gastric irritation is intense it is some-

-time allayed by sprinkling about the one fourth of a grain of calomel rubbed up with a little dry white sugar upon the tongue. If this should fail however a few drops of spirits of turpentine or a solution of Camphor in Sulph Ether repeated at short intervals will often succeed — Rubefacients applied to the Epi-gastrium so as to cause counter irritation for this purpose mustard combined with syrup of ipecac is above

the best application for the vomiting be persevering with pain & tenderness over the abdomen. Few leeches over the stomach followed by a light emolliens poultice or warm fomentations to the abdomen have been recommended by "Dr Hood" & others — The patient should have at this stage if the thirst persists & the vomiting continues above a teaspoonful of cold water which often assists the excessive irritability of the stomach

When all other means have failed to check the vomiting an anodyne injection may be resorted to containing from three to six drops of the tinc opii in a little starch water but if there be any symptoms of cerebral disease it would be proper to omit the opium. When anodyne enemata should be at bed-time as they would be useful in inabling the patient to rest & assist in reviving the peristaltic action

of the bowels. Great care should however be taken so as not to give too large a dose of any agent that we may deem necessary to employ particularly opium as it might cause cerebral trouble.

When the disease had become of a low abated mild purgatives should be given so as to evacuate the bowels. Rhubarb & Magnesia are excellent for this purpose. Magnesia is particularly indicated when the stools have a sour smell & greenish

color—If then the evacuations are small & blended with mucus & attended with much pain—Castor oil should be substituted for Rhubarb & Magnesia These medicines should be mingled with some aromatic so as to make them less offensive to the little patient—

For Infants directly as this crises of the disease a combination of one fourth of a grain of Calomel—three grains prepared chalk one grain acetate of lead & one fourth of a

grain & Ipecacuanha given every three hours. Under this prescription in days the discharge will soon be suspended & replaced by regular natural stools — As the patient gradually returns again to health the greatest care must be paid to his diet & clothing & be moved about freely in the open air — In the more advanced stages of this trouble when the evacuations are frequent & frequent it became necessary to employ more

Elicium astringents such as Kino
Catechu & port wine — These agents
act probably as much by their an
alterative impression upon the
mucous membrane as by their
astringent properties. The mineral
acids are sometimes used —
with very happy results, those
most frequently employed are the
Nitric & Muriatic & Nitric acid which
seems to exert an alterative influ-
ence over the diseased mucous mem
-brane — When there is great debility

the patient should take a little wine whey & if convalescence is commenced, then is to the frequent administration of small quantities of nutritious [illegible] upon with suitable tonics — Purgatives & the opium with mercurials should be used with a view to a direct impression upon the liver & when there are much fever or the head inflamed appearance or the eyes photophobia with delirium or other symptoms

of cerebral disease leeches should be applied to the temples & behind the ears or to ulations to the scalp & warm bmapiems. foot bath or some other stimulating embrocations to the lower extremities — In an chronic case should the salt-bath be omitted for it is universally acknowledged to be of valuable service & is at all times acceptable — The warm bath would also be beneficial as it tends to relax the secretory

glands promote perspiration & allay pain — If the heat is deficient in the extremities friction & rubefacients should be freely employed in order to restore the parts to a healthy & normal temperature — Oil of turpentine, Liniment of Ammonia & tincture of Opium are the agents generally selected for this purpose —

Parents with children predisposed to this scourge of the nursery chamber would do well to observe

certain simple but very important prophylactic measures such as least we would seem to be familiar to the mind of every one. Suffice it to say that bad impure air, crude diet & dentition are the great exciting causes & require untiring vigilance in connection with them. There are several medicinal agents of signal importance for instance the aromatics the principal of which is an infusion of ginger taken at short intervals

-ed, during the period of danger con-
-ten and the efforts of a mu-
-sicians nature in fortifying the
stomach & intestines against the
attack, of this hideous malady - I have
now said all that my verdant know
-ledge of this disease can suggest
to me. I would say, before closing
this feeble dissertation, would to
God that with it could I witness
the eternal extinction of this
demon, as he stalked at his own
through air unseen, snatching

from our doting hearts the
beautiful objects of our admir-
ation & affection —

AN

Inaugural Dissertation

ON

Alcohol

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Wm. Thompson

Of

Virginia

Session of 1874-5

Chap. I.

In [illegible]

[illegible] and [illegible] [illegible]

[illegible] upon the mind and body of man.

[illegible] the true [illegible] the most

[illegible]

[illegible] The [illegible] dangerous, [illegible] important

[illegible] I propose first to give a gen-

[illegible] account of the article, its effect

[illegible]

[illegible]

[illegible] temperature

[illegible]

material called grape or fruit sugar

contained in certain vegetable juices or

[illegible] or dissolved in water is [illegible]

into alcohol and carbonic acid [illegible]

which escape. The [illegible]

[illegible] contained [illegible]

and [illegible] Many [illegible]

[illegible]

[illegible] the matter contained in the liquid

[illegible] Spirals of which there are numerous

[illegible]

[illegible]

[illegible]

[illegible] ed in Cantéène

[illegible] lèrés à mesures

[illegible] chemical [illegible]

[illegible] and a smaller amount

[illegible] constituting what is known as

[illegible] alcohol,

must be noticed however that this is

pure chemical alcohol, but still can

[illegible] a little water, having the sp. gr.

[illegible] 35. This is the strongest alcoholic liquid

[illegible] by our official code, and there is

[illegible] essential [illegible]

[illegible] as a chemical agent however.

It [illegible]

and a fresh one is produced by
further distillation and it sometimes is
added to the liquid before it is dis-
tilled all the water is retained and
alcohol comes over quite free from
that liquid. This is called rectified
or anhydrous alcohol. It will be
not unnecessary to say that it is a color
less volatile & inflammable liquid of the
sp. gr. 0.794 at 60° Fahr. of an agreeable
fragrant odour, a burning taste capable
& combining with water in all proper-
tions, and with the least [illegible]

4. [illegible]

2. [illegible] (spread).

Effects on the [illegible]

[illegible] to which [illegible]

circulatory and nervous [illegible]

the skin, [illegible] the [illegible]

[illegible] and [illegible]

circumstances the various [illegible]

[illegible] the most powerful & characteristic

effects are those produced when the brain

[illegible] applied to the skin or mucous

membrane in a certain [illegible]

[illegible] dis-

[illegible] pathness.

[illegible]

[illegible] to which it is applied. After which

the blood vessels expand, heat and redness

are induced, and sometimes inflammation,

if the application be persisted in

sometimes the tissues shrink and be

[illegible] and hardened in

appearance — due as some suppose to the

affinity which the alcohol has for the

water which it is thought to abstract

[illegible]

[illegible]

[illegible]

It is [illegible]

[illegible]ted into the veins in sufficient

[illegible] will coagulate the blood,

[illegible] injected into the cellular tissue

[illegible]duce the same effect [illegible]

[illegible] blood vessels, [illegible]

[illegible]tance it is brought in direct contact

[illegible] the blood so as to increase its chemical

[illegible]

[illegible]ing that fluid, and in the [illegible]

[illegible]

[illegible] the [illegible]

[illegible]

[illegible]

[illegible]

[illegible] and in general death in the one case and local death in the other are the consequences. But in its condensing or [illegible] action on the skin we have no proof of any chemical [illegible]. It probably simply increases the vital coalescence of the tissue in the same manner as the astringents. It is a common mode of preventing

[illegible] wash the parts subject to pressure frequently with [illegible] or other forms of ardent spirits. This is used as a prophylactic to sore nipples if rubbed around it during the last [illegible] pregnancy, as it has a tendency to thicken the skin on the part to which it is applied. When taken into the stomach alcoholic drinks produce a feeling of warmth in the epigastrium which is [illegible] the surface, heat and flushing of [illegible] and a [illegible]

[illegible] in the head — a [illegible]

[illegible] or giddiness when [illegible]

[illegible] is not to allow the

effects of the stimulants to [illegible]

The spirits at the same time [illegible]

There is more rapid flow of thought and fancy

[illegible] and more is given to any motion

or action that may [illegible]. There is

[illegible] a [illegible] [illegible]

[illegible] thoughts and feelings of the moment.

The [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible]

[illegible] which [illegible] [illegible]

[illegible] [illegible] [illegible]

[illegible] to continued the control over [illegible]

judgment is lost and latent feelings are

[illegible] [illegible] [illegible] [illegible]

[illegible] [illegible] creditable. Persons however are very

[illegible] [illegible] [illegible] select. Some are cheerful

and good natured; others listless & [illegible]

[illegible] of manner; others again fretful

[illegible] or disputatious and expressions

are often used [illegible] [illegible] [illegible]

[illegible] of the moment which [illegible]

[illegible] leads to the most sad results

The thoughts can now no longer be com-
manded. The ideas become confused; fancies
are thought to be realities & delusions & illusions
are apt to occur which often [illegible]
[illegible] ding sets. It is in this state that the
animal feelings [illegible] the [illegible] are
gratifiated with which the animals of drink-
ing [illegible]. The species of delusion with the
drinker has now come on - or in common
[illegible] the individual is drunk, not mere
[illegible] senses are perverted at this stage
and double vision is one of its well known
concomitants. Still at this [illegible] it

[illegible] there is [illegible]

[illegible] movements. The secretion of urine is generally

[illegible] and the sexual [illegible]

[illegible] affected in the [illegible]

[illegible]. At the commencement of intoxication

the control of the will over the muscles begins

to be impaired, and after a time it is quite

lost. Each muscle may contract regularly,

but the co-ordination necessary for the

attainment of any particular object is not

[illegible] commanded. Hence the staggering of

drunkards, their zigzag [illegible]

[illegible] and other [illegible]

[illegible] their feet. At length the [illegible]

[illegible] gradually [illegible] into [illegible]

[illegible] first; heaviness and vacancy of [illegible]

[illegible] [illegible] [illegible] [illegible]

[illegible] sleep or a sort of coma from [illegible]

[illegible] The patient may [illegible],

[illegible] less completely. If not he is only [illegible]

[illegible] to be dead drunk. The pulse

[illegible] [illegible] [illegible]

[illegible] full and of a certain strength,

[illegible] characterizes compression of the

[illegible] [illegible] [illegible]

[illegible] for from six to ten hours, and

[illegible] Two [illegible]

[illegible] [illegible]

[illegible] frequently. Citizens from [illegible] takes place.

The accompanying symptoms are [illegible] the

general uneasiness and feelings of languor and

depression; pulse feeble; skin cool and clammy

and [illegible] a sense of oppression; often nausea

and vomiting, clamminess of the mouth, and

a [illegible] coated tongue. [illegible] depression of the [illegible]

[illegible] following their great excitement, the

[illegible] [illegible] [illegible]

the influence of cool water, fresh air and

[illegible] as the [illegible] [illegible]

[illegible] yellow accompanies its [illegible]

[illegible] day or two [illegible]

may remain except, [illegible] the [illegible]

[illegible]ation. Sometimes instead of the phenomena above [illegible] nausea and vomiting comes on at some period in the progress of the disease, and the further development of the [illegible] is [illegible]. The patient goes home and leaps off the [illegible] of the steamboat. An intuitive physiological question is as [illegible] contribute to the material, or to the force of the economy, or only excites some of its organs to exhaustion action?

[illegible] The topic of able and learned [illegible]

quisitions I venture merely the [illegible]

[illegible] [illegible]

[illegible] [illegible] [illegible]

[illegible] of the administration, When there is

[illegible] of food or deficiency of [illegible]

alcohol may [illegible] [illegible]

[illegible] carbon, Hydrogen & oxygen [illegible]

[illegible] tissue at least [illegible]

[illegible] alcohol may sustain the [illegible]

[illegible], When [illegible] the [illegible]

[illegible] as with the intemperate it excites [illegible]

[illegible] [illegible] [illegible] with motor, Corn

when the brain has [illegible]

a quantity of material its [illegible]

[illegible] less degenerated. In a word there, accessory

[illegible] is a happy one. When unnecessary as in

[illegible] alcohol is injurious [illegible]

[illegible] in proportion to the quantity used, and the [illegible]

[illegible] in disease, [illegible]

[illegible] proportionate alcoholic stimulants

[illegible] be never be taken in quantity, which

[illegible] induces circulatory or cerebro-nervous

disturbance or super excitation.

Of this rule be observed not only will it

be a valuable supporting agent in Phthisis

and [illegible]

morbid thirst [illegible]

[illegible] disease [illegible]

upon this principle, in the [illegible]

[illegible] in cases of [illegible], or

incurable [illegible] in [illegible], [illegible]

to [illegible]. Alcohol in advanced or

[illegible] consumption, in low fever and

in the analogous cases, when used in

the [illegible] is useful: Firstly its direct

[illegible] supporting power. Secondly, in

the enfeebled stomach, to digest a larger

[illegible] of food. Thirdly, tending to [illegible]

Transcutaneous phases.

is to poisoning by Alcohol [illegible]

that every person indulging to the [illegible]

[illegible] either from a temporary debauch or

from the habit of drinking alcoholic

liquors to excess, consider as falling

[illegible] under, First I shall treat of the acute

and second of the chronic poisoning.

Acute alcoholic poisoning is that in which

life is endangered by large quantities of

the stimulants being taken at once, or in

succession within a short interval so

that the combined effects are felt at [illegible]

same time. Sometimes in such cases death is almost instantaneous. It is probable that in such cases death results from an overwhelming discharge in the stimulated spinal cord, the brain sympathetically, and that the symptoms are those of pain, & relaxation of the sphincters. But such instances [illegible] are extremely rare. General there is a brief excitement followed gradually by coma which when the result is fatal, death takes place at a period varying from [illegible] to twenty-four hours. The symptoms vary so much in different cases.

[illegible] of [illegible]

[illegible] [illegible]

[illegible] apoplexy. This [illegible] [illegible]

predisposed to this affection. The [illegible]

[illegible] [illegible] indulgence

may [illegible] this effect by determining

blood to the brain. The quantity of blood

flowing into the brain [illegible] a general

congestion of the organs, and sometimes

[illegible] sanguineous effusion takes place.

The patient may recover from either of

these conditions; but in the latter [illegible]

[illegible] will be [illegible] remains.

[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] of inflammation of the brain
or its meninges. This condition is [illegible]
[illegible] [illegible] [illegible] the disappearance of
coma or the symptoms of the first condition
are commingled. Whenever with severer
[illegible] delirium there are delirious convulsions,
[illegible] contraction of the flexors muscles and
[illegible] [illegible] [illegible] [illegible] [illegible] of the
inflammatory cerebrilation [illegible]
[illegible] [illegible] [illegible] [illegible]

This condition of things however is more
apt to occur from a continued debauch

[illegible] trial days or [illegible]

[illegible] drunkenness. [illegible]

[illegible] a condition [illegible]

It is a very dangerous condition and

the patient may die of it after sinking

into a state resembling typhoid fever

in [illegible] [illegible].

Still another mode of poisoning is by

[illegible] in gradual manner of the stomach

and bowels. Alcohol when habit-

ually [illegible] in small quantities tends to

[illegible] down the system and if persisted

in [illegible] lead to chronic poisoning and

to men who thus partake of alcohol
their systems were receptive to disease
and less able to sustain illness. Nevertheless
the effects of alcohol on the system are
very marked. Effects which should
be avoided are not to be considered
with their bearing upon the mind and
morals as well as upon the happiness both
present and eternal of him who indulges
freely. There is hope for the drunkard
other sensualists, lying & kind Providence
will reach a remedy but the drunkard.

Respectfully submitted

AN

Inaugural Dissertation

ON

Phthisis Pulmonalis -

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Cyrus McCormick

of

Clarke Co- Va

Session of 1864 + 1865 -

Phthisis Pulmonalis

I have chosen for my Thesis "Phthisis Pulmonalis" a disease which is commonly known as "Consumption." In fact Pulmonary Consumption, Tuberculous Consumption & Phthisis Pulmonalis are synonomous terms. The word Phthisis means wasting away. Hence the common name "Consumption" but lately it has been restricted to that species of ~~[illegible]~~ wasting disease in wh. the lungs are the part prominently affected. I do not mean to say however it is confined to the lungs for

One & all will agree with me that it is simply a part of a malady which affects the whole constitution but the lungs is the first part of the body that experiences its ravages & affects the majority of the profession now recognize Phthisis as the distinctive title of the tuberculous complaint. Since just been stated that consumptive persons have scrofulous diathesis

(Anatomical characters). The first process of the disease is to deposit in the lungs matter of tuberculous

kind - tubercles are composed of unorganized matter - which is deposited from the blood. They are of a yellow color - of equal friable & soft - about the firmness & consistence of cheese. This matter is generally deposited on the free surface of mucous membranes sometimes among cellular tissue. They are generally of round shape though their form depends entirely upon the tissue - in which they are deposited, according to

"Caseated" – often they have become a solid form then can be no alteration except through the lot in contact with it – Beside this species of inflammation often find small semi-transparent bluish gray granules, these are "miliary tubercles" – The <u>Crude</u> tubercle is the result of the transformation of the miliary – the lymph is actually increased by new exudations – even quite modern it is about as large as after its extension

from the size of an inch and to an
hence age - the next change in
the tubercle is that it begins to soft-
ten - which generally begins in the
centre & then soon gradually gets
the ~~circum~~ peripheral until the whole of
it is converted into a soft pulta-
ceous mass - something like pus - this
substance by a process of absorption in the
surrounding texture is gradually sucked
up - & expectorated. I should have said
before that these tubercles are general-
ally formed in the upper & back parts

of the ulcerated bes - It is then they
ripen & are expectored - after wh
there is a cavity formed wh is
technically called a Vomica. The
number & magnitude of the Vomica
gradually diminish from above
downward. The left lung is gen-
erally the first & more often affec-
ted than the right - though both
may be affected at the same time though
in unequal degrees. A seeming from
a preference for the left - These
Vomicae vary in size as do the

tubercles from a pin's head to a lens size. Walson says "sometimes the whole upper lobe is converted into a bag of this kind, but that these cavities are never met with in the lower lobe."

Because of several forming are they irregular & are often divided into chambers by imperfect partitions. There is always one & perhaps several bronchial tubes entering into the cavity, but never or very seldom a blood vessel. & when they do the blood vessels are inferior. When these vomicae occur

Singly and are emptied of their contents. they may become obliterated & if this occur there will remain a cicatrix - Again the morbid fluid may be absorbed - & the salts may crystallize. the whole then is converted into a chalky - mass - which may be coughed up. or being harmless it may remain in the lungs - Occasionally a blood vessel is laid open & there may result a fatal hemorrhage - When the tubercles are numerous & when they lie near the surface the pleura of the lung adheres to the sides.

The bronchia are not unfrequently inflamed in the advanced stages of the disease – & especially those that communicate with the tuberculous cavity – Occasionally numerous minute ulcers may be seen upon their mucous surface. Hemorrhages are more frequent in the trachea. The bronchial glands are frequently enlarged & loaded with tuberculous deposition. Hepatization of large & continuous portions of the lungs is not uncommon & when it occurs it arises generally from incidental causes unconnected at least directly with the tubercles.

(Appearances in other parts of the body –)

Outside of the lungs the deposition is generally in the form of the yellow & gray tubercle. Seldom in that of the transparent granules. The stomach after death has the appearance of organic disease. Usually larger & thinner than in health. The mucous membrane exhibits all the signs of chronic inflammation. Sometimes there is ulceration. There are also similar marks of inflammation in the small intestines. There are tuberculous granules in Peyer's glands as well as ulceration. Then too they undergo the process of softening & discharge & terminate

In ulcers - Other little tumors, not of tuberculous kind are often visible in the small intestine. Louis thinks them to be inflamed mucous glands - like Tubercles they end in ulceration - Occasionally these tuberculous ulcers perforate the coats of the intestines & allow their contents to escape into the peritoneal cavities.

The liver too becomes enlarged & becomes full of adipous matter. it yields when heated an oily substance wh: will make a grease spot on paper when placed in contact with it - The stand topes its

natural red tint & assumes a pale fawn color. This fatty lines may not be recognized during life except sometimes by percussion & pressure with the fingers —

(Symptoms. Course &c.) We may observe two stages in the course of Phthisis — One preceding & the other following the period of the maturation & discharge of the tubercle. It is often difficult to tell when the first stage ends & the other begins (1st Stage). Phthisis begins in different modes. Perhaps the most frequently the first symptom is a dry hacking cough wh. is very slight at first, but goes on to increase until it then

Expectoration which contains at first transparent mucous matter as in common catarrh - the appetite is good. All the functions of the different organs may be regularly performed. When the patient exerts himself a little more than usual there may be a little shortness of breath & a little more than ordinary feeling of fatigue. Pulse a little quicker. As the complaint advances the patient begins to feel feeble ~~[illegible]~~ - tends towards evening - with flushing of the cheeks, heat in the palms of the hands & soles of the feet. Frequently there are fugitive pains about the sternum & sides. But probably the most characteristic symptom is emaciation -

This however is not always an attendant upon the incubative stage. Patient may ascribe his cough to an obstinate cold, his pains to rheumatism. at length his cough is increased like mine the pains. & the first thing that warns him of his consumptive state is an attack of hemorrhage. after the subsidence of this, the patient thinks himself better. in fact recovering. or it may aggravate the disease & make it to progress the more rapidly. The symptoms advance. the expectoration becomes more purulent. & appetite impaired. tongue furred

Pulse almost frequent - face flushed &
soon the disease goes into the second stage
which often comes on so gradually that
the precise time of its commencement
can not be fixed. The patient now goes to bed
& suffers with pain. heat - thirst. loss of appetite
&c - The Expectoration is now purulent which
is a good characteristic of this stage - Cough
increased & generally troublesome in
the morning - pulse becomes quicker about
evening - The Conjunctiva is remarkably
clear & there is generally brilliancy of
the eye - The fever is now decidedly hectic

In character - not unfrequently there are chills. the finger nails curve forward. At an advanced period there is often diarrhoea, wh. may alternate with the night sweats. hoarseness & loss of voice not uncommon - dyspnoea often alarming. Wood says "Cough, sequences is most prominent symptom. then Hemorrhage then. frequent pulse. night sweats &c &c" - (Auscultatory Sounds -) - When pus or vitiated mucous or liquid of any kind is collected in a vomica. we get what is called a "gurgling" sound. wh. is not diffused as large crepitation is - Again

If the vomica be empty we get a "cavernous sound" which is hollow, especially if the cavity be of large size - It may be a chirping, creaking or a click.

If the cavity be large and have dense walls & near the surface, we will hear when the patient speaks pectoriloquy - Walson says that cavernous respiration is much more alarming than pectoriloquy & that when ever the latter is from a cavern, then also will be heard cavernous respiration. but that the converse of this is not true - When the deposition is considerable some dullness may be perceived under & above the clavicle - (Course, Duration, &c) - The

Duration of Phthisis is variable - Some cases may run their course in a month while others have been known to continue for 30 or 40 yrs - Wood says the greater number of cases terminate in from 1 to 2 yrs - When the disease is very rapid & it is sometimes denominated "Rank" or "Galloping consumption" - Ordinary Phthisis undergoes temporary interruptions though sometimes it is quite regular in its march - Sometimes the ordinary signs of this disease seem to be completely in a dormant state - & continue so for until a short time before it ends -

For the tuberculous deposition may take place so slowly as not to excite sensible irritation in the surrounding tissue, which therefore undergoes the necessary alteration without any of those external symptoms which constitute the earliest symptoms of the disease. Accumulation going on — one or more large collections are formed & when communication with the bronchia is established the irritating influence of the pus — expectorated bronchitis — & we have suddenly all the symptoms of the last stage — (Nature & Causes —) — Phthisis does not consist merely in a tuberculous deposition in the lungs, for as I have said before, there

Dissemination of a morbid state or diathesis upon which it partially depends - This diathesis is the same or else is closely allied to the scrofulous - Its exact nature is not known. it may be owing to a certain laxity of the tissues. from which cause there is separated from the blood a peculiar product which acts as a foreign matter in the living structure. The blood may be in fault though its only defect is in the capillaries - There is something more than a condition of debility - for it may exist without any production of tubercles - Inheritance is the most influential of predisposing causes but perhaps is cold - age - according to

Louis persons are most apt to have it between the ages of twenty & thirty. (Influence of Sex & Occupation) - According to the researches of many eminent physicians, more of the "fairer sex" are the victims of this disease than their opposite. but according to my own mind this does not hold good, but I suppose Valentis. Carvés. Louis & authority is better than McCormicks. The former gentlemen go on to state that men become consumptive by the direct action of local irritation on the lungs themselves for their uncertain occupations in which they engage which actually conduce to this disease - i. e. -

Stone masons - miners - metal grinders -
&c - most of them men live in towns - have
sedentary occupations & remain in constrained
positions without ~~any~~ muscular exertion
On the other hand we have for examples
farm hands - butchers &c - who are com-
paratively exempt from Phthisis - Some
ascribe this exemption to the uniform
food - but the most popular opinion now is
that is due to exercise in the open air -
I do not think Consumption contagious -
yet there are cases on record where men -
we - a few months after the death of

The patient become consumptive. They that are of the opposite opinion, would gladly avail themselves of this to embolden - trouble them in their opinion - but it is my humble, nevertheless my firm opinion that there is invariably in all such cases a latent diathesis to the disease - (Diagnosis)

Sometimes it is easy to diagnose a case of Phthisis. There again it is extremely difficult - Easy when the tubercles are numerous large & advanced - The fact that tubercles occupy by preference the upper part of the lung is of great moment in relation to the diagnosis.

Watson says "It may be laid down as a rule with but few exceptions that if you find dullness on percussion, a coarse or insufficient breathing, or unusual resonance of the voice, a click or morbid noise of some sort when the patient respires or coughs or speaks, if you find this day after day & always between the Clavicle & mammae in front or between the Clavicle & upper edge of scapula over the top of shoulder & no where else & more especially if these deviations from the healthy sound be limited to one side, or greater on one side than the other, or differ in one side from the other, you may set the case down as a case of Tuberculous phthisis —"

Incipient Consumption is more likely to be confounded with Bronchitis. we know that in Bronchitis the morbid sounds are more audible in the lower lobes & in Consumption in the upper lobes. hence it would be easy to discriminate. The pain that is felt in Bronchitis is beneath the Sternum & in Consumption it is generally in the sides & between the Shoulders.

Phthisis is not necessary a fatal disease. When a limited amount of matter is thrown down & exuded the patient may

Ortuce. (Dr McSherry). There also are the views of Dr Donaldson - When Sir Astley Cooper died he requested that a post mortem examination should be made of his body - In making this examination it was found that there were cicatrices in his lungs - showing that he had had the disease + had recovered - (Treatment) - In the first place we try to prevent any farther deposition of tubercles - + then to prevent those

that are already deposited from
which they were likely to
accomplishing their fatal influence
not interrupted — arrested — To
accomplish their ends Dr McCheney
thinks Cod Liver oil good — Dr Don-
aldson recommends a visit to a
cold, dry climate. e.g. — Minnesota —
Dr Watson — Madeira — To support
the patients strength. which by the
way is one of our principal objects —
we do not rely upon stimulants as much
as upon hygienic remedies — In fact
medicines are only secondary

he value - If there be pulmonary inflammation an antiphlogistic diet would be best - if not a generous & full diet would be more proper - Milk is because it is both nutritious & unstimulating may in many cases be the staple of food - Blisters. bleeding. Emetics. all have been recommended to perform their proper offices - an important consideration is the proper temperature of the body - Mental anxiety has its influence too - he tries to relieve

cough by the use of demulcents - E.g. lozenges to be held in the mouth - decoction of wild cherry bark &c - &c - If these fail we should consider narcotic remedies - one of the most preferable of these is one of the salts of morphia - which should be given with mucilage or syrup - when there is dyspnoea relief may be obtained by inhalation of camphor. Tobacco

A common & troublesome symptom is nocturnal perspiration. An admissable remedy for this is dilute sulphuric acid

This also will be valuable in constipation of the bowels – It may be given three or four times a day – in doses of from 12 to 20 minims – I think I should rely as much upon exercise in the open air as any thing else – A gentleman of this city told me he was a sufferer from this disease & used iron, quinine & strychnia – went to the Rockbridge Alum Springs last Summer – stayed there for some time & improved rapidly – came back here & had his lungs reexamined, & they are all right – he also says he takes about ½ oz whiskey three times a day – ½ oz just after each meal & during the meal –

In writing this my "thesis", it has not been my aim to enter deep into details - for ~~to~~ avoiding that I would consume more time than I could conveniently spare. I hope however what has been written will be sufficient to satisfy the just demands ~~of~~ of the faculty of the University of Md.

AN

Inaugural Dissertation

ON

Venereal Virulence of the Urethra

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

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Of

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Permanent Stricture of the Urethra.

By this we are to understand a condition of the urethra in which there is a diminution of its caliber, due to an exudation of plastic lymph, the result of inflamation in some parts or parts of the mucous membrane of the urethra or its surrounding tissue - by which the parts become united, organized and consolidated at the seat of disease. Strictures have received various significant names - such as the bridle stricture - the ribbon stricture &c. from the peculiarities of their pathological appearances -

this being however, a matter of very little practical importance, as it would be almost impossible during life to distinguish the one from the other. As regards the most common seat of stricture there is much difference of opinion among surgeons, the membranous portion being thought by some to be the most frequent, whilst others consider it less so, however I believe it is now generally agreed that the most ~~most~~ common seat of stricture is the bulbous portion of the urethra the membranous being next in frequency - whilst the prostatic portion is very rarely affected.

The extent to which the urethra is involved in stricture varies from a mere line to an inch, or more. Urethral-stricture is a disease almost exclusively of men - being rarely observed in women from the fact that the urethra in males is long, narrow and complicated in its structure whilst in females it is nearly straight - wide and short - possessing but little complication in its structure.

Causes. -

As I said in the beginning that stricture was the result of inflamation I might say that whatever produces inflamation of the -

urethra may lead to the formation of stricture. Surgeons have divided the causes of stricture into predisposing and exciting. Among the predisposing causes I might mention age as one, persons between the ages of puberty and forty or forty five years are more liable to stricture than at any other period of life from the fact that during that time their sexual organs are in a state of activity. Another predisposing cause is climate - the inhabitants of warm climates are more predisposed to stricture than those of temperate climates because -

they are more addicted to venereal gratification. There are certain states of constitution that predispose to stricture - persons of a sanguine, excitable temperament are more liable to stricture than those of a colder nature.

Among the exciting causes of stricture - gonorrhoea is one of the most influential and perhaps most frequent causes. Other exciting causes are - the continued discharge of unhealthy urine, practice of self-abuse, intemperance - chancres occurring at the external orifice of the urethra are sometimes -

productive of very troublesome strictures from the cicatrix which they leave after healing - the use of strong injections of nitrate of silver in the treatment of gonorrhoea - during the acute stage, is often productive of stricture.

Symptoms. -

Perhaps the first symptom that will attract the notice of a person affected with stricture is, that he experiences some difficulty in starting the urine, and that instead of being voided in a full and round stream as formerly - it is somewhat flattened and the act of micturition -

requires a longer time, and greater effort than usual - he will probably next observe a few drops of urine to hang in the urethra and dribble from him after the act has apparently been completed. As the contraction goes on in the urethra the stream of urine becomes bifurcated, scattered or twisted, at length the patient finds that the necessity of emptying the bladder becomes more frequent during the day and often compelling him to rise two or three times during the night for that purpose.

When the disease has progressed

considerable, and the urethra becomes very much contracted, the urine is expelled with great difficulty - either by drops or in a very small stream with much straining - calling into play very often the abdominal muscles, and in very bad cases there may be complete retention of urine.

There are other symptoms connected with stricture, such as a gleety discharge - this being sometimes so profuse as to simulate gonorrhoea. Nocturnal emissions, pain about the loins, perineum and anus. Rigors are sometimes experienced by-

persons with stricture, and have been mistaken for ague.

Finally, if the disease is allowed to go on unchecked, the tendency is, sooner or later to impair the general health.

The disease which had existed in the urethra alone, now becomes complicated with disease of the bladder - the mucous membrane of the bladder takes on a low form of inflamation from the irritation produced by too long retained urine - and then the constitution of the patient begins to be impaired, and if the obstruction existing in the

urethra be not removed a fatal result is the inevitable consequence. Although the symptoms that I have enumerated are in themselves generally sufficient to make out a correct diagnosis they are not regarded as pathognomonic - as there are some affections of the urinary organs in which the symptoms resemble very much those of stricture. In order to make out a positive diagnosis we must resort to some instrument with which we can explore the urethra - such as the Catheter or bougie.

By this means we ascertain -

not only the existence of a stricture, but also its seat and extent as well as its consistence

Anatomy of the Urethra.-

The urethra is the membranous canal which extends from the neck of the bladder to the meatus-urinarius. It varies in length from eight to nine inches, and is curved in its course - the concavity looking towards the symphysis-pubis.

Anatomists make three portions of the urethra - the spongy, the membranous and the prostatic, so named from their anatomical structure.

In case anatomists the bulb of the corpus-spongiosum is considered.

as forming a portion of the urethra, and thus they make four portions instead of three.

The urethra consists of three coats, a mucous, muscular and erectile - the mucous is continuous with the lining mucous membrane of the bladder internally, and with the covering of the glans-penis externally - the muscular coat is divided into two layers of muscular fibres - an external layer which is arranged longitudinal and an internal layer circular.

The first part of the urethra or the prostatic portion, so named from perforating the prostate -

cland, measures about an inch and a quarter in length, and is spindle-shaped - in this we find running along the lower portion a ridge - formed by an elevation of the mucous membrane. The verumontanum, in front of this, is a depression, the sinus pocularis and within it opens the ejaculatory ducts. On either side of the caput-gallinaginis is a depression, in which are the orifices of the prostatic ducts. The nesh portion of the urethra is the membranous - it extends from the anterior part of the prostate to the bulb of the -

corpus-spongiosum and measures about three quarters of an inch along its upper, and half an inch along its lower surface, in consequence of its being slightly curved at its under surface by the bulb. With the exception of the external meatus This is the narrowest part of the canal. It perforates the triangular ligament, and is surrounded by loose tissue, and some muscular fibres - which bear the names of Wilson and Guthrie by whom they were first described. The spongy portion, so called from the sponge-like -

erectile tissue in that part of the urethra, extends from the termination of the membranous portion to the external meatus, and is about six inches in length. This portion is dilated at the commencement, forming the bulb, and at its termination forming the fossa navicularis. Along the whole length of the spongy portion there are a number of minute openings - the orifices of numerous mucous glands and follicles. Within about half, or one third of an inch from the external meatus - on the upper -

surface of the urethra is situated the lacuna-magna-this, very often intercepts the point of a catheter in its passage along the canal, and should be avoided by keeping the instrument to the lower surface of the urethra for about two inches of its length.

Treatment.-

From the frequency of this disease and the severe form it sometimes assumes, it has of late attracted the attention of the best surgeons of the day, and were I to undertake to describe the numerous and complicated instruments-

invented by them for its relief. the description would be, I am sure, no less exhausting to the patience of the writer, than the perusal of this essay would be to the reader - and after all be of no real practical importance.

It is therefore, not my intention to occupy these pages with a detailed account of the various instruments and modes of treatment adopted by different surgeons, but shall restrict myself to a brief description of such methods of treatment as observation and experiment has proven to be -

the most successful.

The treatment of stricture are both general and local - by general I mean such medicines should be given as tend to improve the patient's general health, allay irritation and keep the urine in as healthy condition as possible.

The local treatment, which is the most important - consists of mechanical means, such as - Dilatation - The application of some caustic agent to the diseased portion of the urethra - or by a division of the stricture. The first method or that by dilatation -

is the best and the one now generally resorted to by surgeons - indeed the other "methods" may be considered only as aids to dilatation, as without dilatation they accomplish but little good. Dilatation is effected in two ways - either by the bougie or sound which is a slow and gradual process - or by means of expanding instruments - "Special Dilators" as they are termed - which effect speedy dilatation - These are to be used at the discretion of the surgeon. The simplest means of dilating a stricture is by the use of the ordinary bougie, and in-

the great proportion of cases this is undoubtedly the best method of proceeding, as it involves very little danger to the patient, and in nine cases out of ten will effect a cure - indeed I believe there are very few cases of stricture that will not yield to this plan of treatment when it is properly conducted.

The instruments used mostly in dilatation of stricture are bougies, catheters and solid metallic sounds; according as the stricture is of a soft yielding character, in which case we employ the bougie; or of a hard-

cartilaginous character, when we use the metalic sound as being preferable. In introducing these instruments into the urethra we are to use all possible gentleness and caution - bearing in mind constantly the anatomy of the parts. No forcible and unscientific attempts should be used to stretch a diseased and sensitive part of the urethral canal - as has been done by inexperienced practitioners - which is the abuse, and not the proper use of this most admirable of all methods of treating the generality of urethral stricture.

We should not be over anxious to accomplish too much at once, but devote the requisite time and attention to each and every case.

In commencing the treatment of a case of stricture (by simple dilatation) we select at first an ordinary size bougie, one that will readily enter the orifice of the urethra - and having previously oiled it to facilitate the entrance, we draw it through the hand several times - to make sure of its being perfectly smooth and then gradually pass it into the urethra and through the stricture, if possible. -

if however this cannot be done, one should select a smaller size bougie, and so on, until the one selected should prove small enough to pass through the stricture without much pressure. In cases in which the smallest size bougie cannot be made to pass, we may sometimes employ successfully a small silver catheter or sound. When once we have succeeded in passing an instrument through the stricture, it should not be removed immediately, but allowed to remain in the urethra for from five to thirty minutes or more

according to the degree of irritability of the urethra. This will have a tendency to diminish the morbid sensibilities of the stricture and facilitate the reintroduction of the instrument. The size of the bougie is to be gradually increased, after having passed one, until we succeed in restoring the canal of the urethra to its normal size or nearly so.

Prof. E. F. Smith - recommends the use of dipping elm-bark as one of the best means of dilating stricture. This mode of dilating was-

first proposed by Dr. McDowell of Virginia in 1837, but from the supposed liability of the bark to fracture its use was abandoned. I think however, that this is a mistake and that when properly used there is no danger whatever. The chiffery-clown-bougie can be made in a very few minutes with an ordinary pocket-knife.

Previous to its introduction into the urethra it should be placed in water, taking care not to allow it to remain too long, as it might swell before coming into contact with the stricture, and then having it-

well oiled, gently pass it into the stricture, after remaining there a short time it swells, and gradually dilates the stricture Prof. Smith has used the slippery-elm-bougie for a number of years in the treatment of stricture with signal success

Having been connected with the "Baltimore-Infirmary" for the last two winters (where a number of stricture cases are treated yearly) I have had the pleasure of witnessing the good effects of this treatment - and from the -

facility with which this bougie can be made and the gradual and easy mode in which it accomplishes dilatation - I regard it as one of the most admirable means of treating stricture.

We now and then meet with cases of stricture in which we wish to accomplish dilatation as rapidly and prompt as possible. In those cases we have to resort to the use of some expanding instrument - of which I believe Holt's Dilator to be as good as any. With regard to the use of this instrument I would say - that it is -

applicable only where an instrument of moderate size can be made to pass through the stricture, and then we have overcome the greatest difficulty. and I believe the cure will be much more readily accomplished by the use of bougies (Although the cure of most cases of stricture can readily be effected by dilatation, we now and then (unfortunately) meet with obstinate cases in which it will fail, and then we have but two means to resort to - either the application of some caustic to the stricture.

or its division by some-
cutting instrument. both
of these methods are attend-
ed with considerable danger
to the patient, as well as
inflicting severe pain - and
should not be resorted to, until all-
other means - less powerful
have been tried.

AN

Inaugural Dissertation

ON

Delirium Tremens

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James B. Chesley

Of

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Session of 1867-1868.

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Delirium Tremens. This is one of the local diseases of the nervous system, consequent upon the absence of a habitual stimulant. It is an affection of the brain, the chief symptoms of which are - delirious hallucinations - foreboding of evil - muscular tremors - and constant wakefulness. The various stages of the disease present a considerable diversity of appearance, with different complications.

First stage. This stage of the disease is commonly known as the "horrors" It is the first effects after the suspension of the stimulant, and is generally relieved by again resorting to it.

The symptoms of this stage are great physical and mental depression, without positive delusion a difficulty in obtaining sleep - a quick pulse cool hands and feet, with a disposition on

the part of the whole surface to perspire, while the digestive organs cease to perform their healthy functions.

Aggravated condition. If the privation of the stimulant is prolonged, the disease assumes a more serious form: it is at this stage of the disease that those vivid impressions are made on the mind, through the imagination which have for the time all the force of reality. The patient thinks he sees the most disgusting objects: such as devils reptiles vermin. There is no end to the diversity of these hallucinations. There is one feature of the disease, which is generally attendant upon these hallucinations, an uncontrollable feeling of fear, which influences all the movements of the patient, and which

sometimes leads him to self destruction to escape the imaginary impending evil. The patient when guilty of any violence is not influenced by feeling of revenge or hatred but is simply actuated by a desire to escape some danger or disgrace. The manner of the patient is not always violent, frequently the disease can be only detected by a close examination; when it will be found that there is on the face, a peculiar absent look; and a listening attitude assumed as if endeavouring to catch sounds of awful significance.

Some of the characteristic symptoms are a morbid vigilance - broken and disturbed rest culminating in continued wakefulness when the disease has reached its most

dangerous point - muscular tremors affecting the whole system sometimes resulting in convulsions - the pupil of the eye is contracted though there is no intolerance of light. The pulse is sometimes quite natural, but may be softer and weaker than in health, then again frequent and feeble - a furred tongue - no appetite - constipated bowels - dark and offensive stools - fetid breath - profuse perspiration accompanied by an unpleasant smell. are some of the many symptoms of this disease. The patient in most cases dislikes confinement in bed and tries to keep on his feet. If there is great debility with feeble pulse - cold skin and pale features - the patient should not be allowed to use much.

exertion, as death frequently results from over exercise.

Favourable Stage After the lapse of several days, the patient usually falls into a deep sleep, which lasts from twelve to thirty six hours. From this nap he awakes much debilitated. But free from the hallucinations which formerly haunted his mind. Though some delirious symptoms may occasionally recur. Sometimes the patient sleeps only a few hours, which is followed by an amelioration of the symptoms, which subsequently disappear upon a return of rest.

Last Stage This condition of the disease is characterized by great prostration, and results from improper treatment or the

absence of any treatment. The previous illusions now give way to incoherence it becomes necessary to confine the patient to his bed. The symptoms in the earlier stages are now seen in a more aggravated form. Subsultus tendinum - muttering delirium - coma - and convulsions give notice of the approach of death. The duration of this disease is from three days to two weeks. The disease sometimes presents itself in complication with the immediate effects of the stimulant - or with accidental affections In the former case the direct effects of the excitement upon the system become mingled with those produced by the privation of the alcohol The symptoms are morbid cerebral excitement from the

direct agency of the drink - the face is flushed and turgid - the lips intensely red - the head hot - furred tongue of a fiery redness - the appetite gone - full pulse - and extreme thirst. Again the patient may have sustained some serious injury or attacked by disease. The physician should exercise great care in the treatment of such cases, for sometimes the effects of the injury and those resulting from the formation of the stimulant so modify each other as to greatly confuse the diagnosis. All the phlegmasiae are liable - and in some diseases the cerebral phenomena are apt to mask the symptoms of the original affection - this is especially the case in pleurisy and pneumonia

Anatomy of the disease Though such cases are rare, it sometimes happens that an opportunity offers for examining cases of uncomplicated delirium tremens. Such examinations have failed to discover anything which could account for the symptoms. Any affection of the organs not natural is either due to diseases upon which the delirium supervenes — or from causes which must be regarded as strictly functional.

Causes The prime cause of delirium tremens is the suspension of an exciting influence which has become a cerebral habit, essential to the ordinary action of the brain. Persons who steadily indulge in stimulants are more liable to this disease, than those who only occassionally

indulge to excess, giving the brain an opportunity to assume again its healthy state. The laboring man is not so liable to it as one of sedentary habits, because by vigorous exercise the influence of the stimulus is transferred from the brain to the various functional offices of the system. The disease may result from the use of any alcoholic stimulant though it is more apt to be developed by the strongest. It is not well settled whether this disease can result from the use of opium. It can be produced by excessive indulgence in tobacco, but in this case it is caused by the direct influence of the sedative on the brain and not secondary as in the case of strong drink, and ceases

when the narcotic is omitted.

The delirium is frequently ended by vomiting. Nausea which is much a cerebral action as any other sensation cannot occur while the brain is under the effect of causes producing delirium tremens. It has not been satisfactorily settled, whether the delirium in the temperate after severe surgical operation is identical with that produced by alcohol, there is certainly sufficient difference to sustain doubt on the subject.

<u>Diagnosis</u> The diseases which delirium tremens should be distinguished from are febrile delirium, meningitis and insanity. In the case of fever the

delirium is more incoherent. Though not attended by fear and hallucinations. There is greater prostration than in delirium tremens while the countenance has a very different expression. The last stage is very much like a peculiar form of typhoid fever. but a knowledge of the case in its incipiency will enable the physician to distinguish between the two.
The delirium in meningitis is more violent. with more fever. and a stronger tendency to coma and convulsions, though it is devoid of the hallucinations and tumblings of the disease produced by stimulants. Sometimes the two affections will be seen united, presenting a case very complicated in its character.

The devellopment of insanity is much more gradual. The tendency to be the victim of fanciful illusions is not so great. while it is less frequently attended with muscular tremors. Mania is more incoherent monomania more rational Dementia complicated with palsy might be taken for delirium tremens but the error must soon be corrected. Dementia is not attended by that wakefulness so characteristic of delirium tremens

When insanity occurs in a drunkard and becomes complicated with the disease it presents a case of greatest difficulty. It is necessary to form a proper diagnosis of this disease. that the physician should be familiar with the previous

habits of the patient.

Simple delirium tremens is not a dangerous disease. It generally subsides spontaneously. The chief thing to guard against is debility and exhaustion after muscular exertion. Each successive attack is attended with more danger.

Treatment As the cause of the disease is the cessation of the use of the stimulant. The first thing necessary in treating a case of delirium tremens is to endeavour to stimulate the brain to a proper action, and after this is accomplished to gradually withdraw the influence of the stimulus and enable the organ to operate under healthy influences. It strikes us at first

view that this object should be accom-
-plished by alcohol, but not taking
into view the moral consideration
which should prevent us from thus
tempting again the appetite of the
patient for stimulants; and also
the fact that the disease if left to
itself frequently subsides, without
resort to such aid; it is extremely
doubtful whether such treatment
does not have the effect of confirming
the patient in his habit. Even
when tried in hospitals where the
patient can be kept from temptation
for some time after his recovery;
rarely does it work a permanent
cure. But we have a stimulus

which possesses the requisites of alcohol without being attended by its dangers to the moral condition. This is opium which is usually given in the following form – two grains of opium – half a grain of sulphate of morphia – or its equivalent of laudanum, which is given every two hours until sleep results or drowsiness is produced. After this is accomplished its influence should be gradually withdrawn, by lengthening the intervals or diminishing the dose. There are cases where the debility is great when it becomes necessary to resort to alcoholic liquors in such quantities as are necessary to sustain the vital functions. Malt liquors are the

most suitable, but brandy should be used in extreme cases. It must be borne in mind that this remedy is used to give necessary strength, and to prevent a fatal prostration of the system - Tincture of hops may sometimes answer this purpose. When the case shews a tendency to convulsions and the patient is tumultuous, nervous stimulants, such as assafetida, and compound spirits of ether should be given. Where the excitement is very violent give chloriform internally in doses from forty to sixty drops in a little Camphor - the yolk of an egg and water at intervals of an hour or two. Taking care not to produce-

prostration if the prostration is sudden and of an alarming character, give Sulphuric Ether from two to four fluid drachms frequently in connection with powerful alcoholic stimulants. The digestive organs should be kept in as healthy a condition as possible, if constipated use cathartics, adding Calomel when the hepatic secretion is deficient. Use mild depletory purgatives, such as magnesia Castor oil rhubarb and Aloes. Senna if a strong purgative is needed.
If the disease should assume a typhous form. the strength must be kept up by carbonate of ammonia and nourishing drinks. Sleep may be induced by a blister over the whole head; this remedy

Should also be used when convulsions and coma prevail.
When sleep cannot be induced by the use of opium, it may be produced by thereal inhalation, but it should be given with much caution.
Belladonna is sometimes applied to the pupil, which has the effect of contracting it, and rids it of the ideal illusions
The sleep of the patient should not be disturbed unless symptoms of coma are evident, when he awakes he should have nutritious food to obviate exhaustion.
In cases where the patient is affected by the direct agency of the alcohol presenting an example of the

complicated typhus, the above treatment should be modified. It now becomes necessary to prevent affections of the brain to resort to bloodletting and cool applications to the head. If the symptoms of congestion disappear, and the ordinary delirium sets in, the simple treatment must be resumed. But if stupor or convulsions continue, the whole scalp must be blistered, and stimulants given in necessary quantities. The arterial and nervous stimulants given in necessary quantities are preferrable, such as carbonate of ammonia, capsicum musk, assafetida.

In the cases of surgical accident the treatment for simple cases should

be followed, and opium freely used unless the head be the part injured. If the patient is feeble, there will be a greater necessity for alcoholic stimulants than in ordinary cases. Quinia may be used to advantage. Some of the most difficult cases to treat are those complicated with phlegmasiae Bloodletting should be resorted to, and alcoholic stimulants in such quantity as is necessary to control the delirium. When the inflammation can be relieved by leeches or cupping these are to be preferred to the lancet Inflamation of the brain presents the greatest difficulty.

In [illegible] the [illegible] of Materia Medica I think I can justly say that I have as yet seen no medicine which has done more towards alleviating the ills of suffering humanity and which better deserves the name of "magnum Dei Donum" than Opium. and in is looking upon it in this high light that I have chosen it as the subject of my dissertation. Feeling, as I do my inability and at the same time a want of confidence in myself to treat a subject which has been so ably handled by others of brighter genius and more experience than myself. Having during my first course of lectures at the University of Virginia given an attentive ear to the lectures of Dr Davis The distinguished Professor of Materia Medica. And my mind being refreshed by the talented Professors of the University of

and I hope the few ideas which I shall express on the following pages may meet with your approbation.

Opium is the concrete juice of the unripe capsules of Papaver Somniferum. The poppy can be found growing in various countries most abundantly in Asia minor, Hindostan and Egypt. The plant is generally 3 or 4 feet in height. Sometimes 5 or 6 ft. Incisions are made into the half ripe capsules. The juice exudes, and is collected and dried. The opium generally used in this country is that exported from Smyrna. of which it is said a large amount is nearly exported. Estimated at from

three to four hundred thousand pounds
It is seen in lumps more or less -
round - weighing from one to two lbs -
and is of a dark reddish brown
color - It has the evidence externally
of having been wrapped in some kind
of leaves - When fresh it is soft - but
becomes hardened on age - Its broken
surface presents minute shining grains
and its cut surface a waxy lustre - It
has the peculiar smell of Laudanum
Has an acrid bitter taste - Partially soluble
-ble in water - alcohol and dilute acids
Insoluble when dry - The essential -
principle of Opium is Morphia, a
vegitable alkaloid - It exists combined
with meconic acid - Good Opium

yields about eight per cent of morphia
Smells very strong. very bitter taste,
and when drawn over white paper makes
an interrupted mark. Morphia was dis-
-covered in 1817. It exists combined with
meconic acid. It is generally extracted from
Opium in the following manner. The
Opium is sliced and treated with water
- This dissolves the meconate of morphia
An alkali is then added. such as Am
-monia. The morphia is precipitated as
colored. Alcohol is then added to hold up
the coloring matter. Then collect and
purify by boiling ~~[illegible]~~ acetic acid and a-
-imal charcoal. Morphia is a white crys
-talline substance. intensely bitter. insol.
-uble in water. particles soluble in alcohol

-ficly so in dilute acids - There are various preperations of Opium. The most of which are Dovers Powders - Tinctura opii - Tinctura opii Camphorata and acetum opii - Dovers Powders contains 1/10 opium - 1/10 Ipe-cac and 8/10 Sulph. Potass - Landanum is prepared by taking powdered Opium and subjecting it to proof spirits - The active principle is dissolved - Contains 1/4 ounces of opium to a pinta of spirits The Camphorated Tincture of opium contains Camphor - oil of anise - Benzoic acid and honey - 30 grs of opium to the pint - Paregoric drop - vinegar is used as the solvent - It contains nutmeg - sugar and - Lather - 74 grs of opium to the ounce - As it is not directly within my province

to speak of the various preperations of Opium. I hope that a passing notice of the most important of them may be sufficient. Opium is administered in various ways. Generally ~~by~~ in powder or pill. The next most common method by the rectum - mixed with 3 or 4 tablespoonsful of mucilage or else made into a suppository 2 or 3 times as much is given this way as by the mouth. It is also administered by the Epidermic and Endermic methods. And still another very common way is by the Hypodermic method (1/3 as much as by the mouth). Effects of Opium.

When first taken it acts as an stimulant afterwards (if in a sufficient dose) it causes relation. Dr Davis says that the excita-

-tion caused by Opium is more refined than that caused by alcohol - Its effects are per-ceptible in about 25 or 30 minutes after being taken - A feeling of warmth or weight in the stomach is experienced in 15 minutes after it is swallowed - after this a dullness in the head, which is soon followed by a "most delicious sensation, with an elevation of the whole moral and intellectual nature" It is certain that the intellect becomes brighter - The imagination stronger - and the feelings more refined - making one feel like throwing off this mortal coil and winging his happy flight to those Cerulian heights where [illegible] and [illegible] immortal reign - "The poet never had brighter fancies, or deeper feelings, or greater felicity of expression,

nor the philosopher a more penetrating or profounder insight, than when under the influence of opium in this stage of its action". It also increases muscular energy, causing one to be more active and more able to bear fatigue for the course of 3 or 4 or even 1 or 2 hours the patient sinks into the sweet embrace of Morpheus.

"As passes a summers cloud away,
As sinks the gale when the storm is over,
As gently shuts the closing eye of day,
As dies the wave along the shore."

Sometimes the effects of opium are different causing one to be restless to sleep in his sleep - and to have the most hideous dreams - This does not happen when given in sufficient doses. Alas! I am sorry to say

that this powerful drug-this precious gift to man is often and much abused - The lover when rejected by his mistress being plunged into the abyss of despair - and when the delusive meteors of hope cease to play around his fond soul - appeals to the soothing effects of this potential drug The poet when attempting to scale the heights of Fancy often drinks the soothing draught that his imagination may be brightened - The drunkard "Who has drank every cup of joy - heard every trump of woe - drank draughts that common millions might have quenched" When the fatal poison has no - longer - the power - of blunting his sensibilities has recourse to the more powerful in-

-fluence of Opium - The Opium Eat-
-er who has allowed this anaconda-as it were
to wind itself around him and lead him
to "guileful shores and seeds of fatal joy"
finds out when too late that he might as well
attempt to seek blooming roses on the
cheek of death - Mellow grapes grow in
the icy pole or substance in this world
of "fleeting shades" as to seek happiness
from the opiate of Turkey and the world.
When taken in sufficiently large doses
Opium is extremely poisonous. The symp
-toms from poisoning are sleep-drowsiness
or stupor according to stage of poison
The drowsiness becomes more complete
-Death comes on in about 12 hours —

Pupil very much contracted - Smell of Opium around - profuse sweat - Dark livid countenance & idiotic expression - pulse & breathing very slow - after death smell of Opium internally - Blood liquid - congestion of lungs and brain - It is hard to detect Opium as it rapidly decomposes - can find it only in the stomach - Have to detect one of its principles

Uses of Opium

During convalescence after the force of a disease is broken and there remains pain - restlessness &c an Opiate will give relief - It is administered by the Hypodermic -

method for wakefulness in severe a Colic - In sighing even when there is low muttering delirium & slipping down in bed it often proves heretical - Wound not be given when the brain is inflamed - Should watch the patient - If it increases the symptoms discontinue it and vice versa - If the pupil is contracted and the tongue dry in this disease use opium cautiously - 20 drops of the tincture may be given - if efficacious repeat in an hour - In cases of colic - immerse in a warm bath and stupify with opium - In violent pain of the stomach

In affections of the heart - an-
gina pectoris - opium is given
In Dr. Doveux gave it by the
hypodermic method - after
surgical operations. In threat-
ened miscarriages - indicated by
intermittent pain in the abdomen
- slight discharge of blood - cause
patient to keep recumbent -
position and give full doses of
opium - 30 drops of tincture
repeated every hour - for
strong condition full doses
of opium are given - In ca-
ses of impending inflammation
in full doses - In cases of

bloody stringy alvine passages
from without path - In cas
-es of poisoning - Given to re
-lieve spasms of Tetanus - by the
hypodermic method - In irri-
tation of stomach not due to
inflammation - valuable in insan
-ity - muscular spasms - Especially
strangulated hernia, to aid in
restoring the intestine - To arrest
discharge from the bowels - kidneys
and bladder. In copious dis-
-charges from the air-passages
in diabetes of pium blunts the sen
-sibility - stops peristaltic action
and stops secretion - In fevers

In intermittents it mitigates the chill
Beneficial also in fevers after the
chill - hence may add Opium to the
quinia - taken in some cases before
the chill. In measels just before
the eruption Dovers Powders force
out the eruption - In small
pox during the maturative stage
Opium is the best remedy. In
Typhoid fever to check diarrhea -
In reaction after hemorrhages Opium
is given with a little brandy and soup
as in flooding from child birth - In
gangrene accompanied by pain
as in Cancer or penis - In dysen-
-tery given locally and internally.

In short opium is an indispensable medicine to every physician. It is called — or in almost every form of disease which flesh is heir to. No medicine in the long catalogue of materia medica is more used and there is certainly not one which could do more towards soothing the pangs or putting to flight the tyrant — pain — when the suffering victim is stretched prostrate upon the couch of disease — when the angel of death hovers like a black spectre around the scene — when agony drives reason from her throne — when the vital spark flickers —

sion in the lamp of mortality
- When visions of Earth are taking
away - When mind and soul -
Heaven and Earth are blended in
one - "When expanded nature is sink
-ing to rest - Still interrupted by
distracted dreams - That o'er the
sick imagination rise - and in black
colours paint the mimic scene"
Tis then that Death steps in and
like the Angel of Mercy troubling
the waters of Siloam soothes the
pains of parting vitality and smoothes
the pillow of dissolution - As
the sailor in his Heaven bound bark
that rocks and creaks upon the

roaring surges of the billowy ocean gives course to his vessel by the helm as life is made subservient to will, as power. Thought, action and volition are the result of material waste. So-Epicure combining all the soothing-powers which heaven has given to man and owning all the force of material-action will be forever mankind's firm-est friend. The tortures of present and future hell are made easy and endurable under its influence mind and matter coalesce to form an homage worthy of its powers.

And now in bidding a final adieu to the University of Maryland allow me to say

that it is with many deep regrets and heart-felt Emotions. Some of the happiest moments of my life have been spent within her hallowed and time-honored walls. And in the far distant future — be it my lot to sail smoothly down life's eventful tide — or be it my fortune to administer to the woes and sufferings of frail mortality in some far distant land — some secluded — enchanted isle — the session of 1867-68 will ever flash across my mind as a sweet reminis-cence of the past — a green oasis in the desert of life. I need not say that it shall ever be my aim to cherish and cultivate the advice and

counsels emanating from my Alma Mater and that it shall be my constant aim to adorn the profession which I have chosen. In closing may I but express the fond wish that new laurels may be added to those already acquired and that the University of Maryland may continue to flourish.

"Till wrapt in fire the realms of Ether glow,
And heavens lark thunder shakes the world below."

AN

Inaugural Dissertation

ON

The pathology of the enucleation

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

James Dunlop Monroe

Of

Virginia

Session of 1867-1868.

Succeeding of the brain

The brain as the most [illegible] organ connected with

animal life, its mere existence indicates

a creative of his wonder & according to

its development [illegible] a scale, [illegible] action

can in the scale of organized beings. The

[illegible] in development is easily traced in

ascending through the four grand monarchs

of animal & animal life the radiata, mol-

lusca, articulata & the vertebrate. The progressive

development is as strongly marked in passing

from the lower animals of the last class

to those [illegible]

of the scale increases in ascending through

the animal kingdom, until the mam-

malia, where it attains its greatest size in

the elephant weighing from eight to ten thousand.

But even in the mammalia a wide difference

exists between that of the lower animals as

the mouse & that of the higher animals, how-

ever its highest development & greatest magni-

tude is not reached until we examine that

of man; man the final object of creation

man who alone of all created things pos-

sesses a Divinity, man who alone of all beings

shewing a creature of mind,

the development of his intellectual faculties

in his turn becomes a creator; Thus within

it is the great Creator, for man noblest

most perfect & stupendous works whether

of beauty, strength or intellect are after all

only his on a small scale of those

with which the great Creator has enriched

in nature

Man in the [illegible] [illegible] the train

in its growth & development of its various

functions according to the standard of the

various races of human beings; it is smallest

& most undeveloped in the negro, though even

in have much larger than that of the cerebellum

the most animal to most to [illegible]

[illegible] we have the mongolian which is itself

is surpassed than that of the caucasian race.

but the development of the cerebellum [illegible] is

visible even in individuals, the same race

in accordance to the predominence of animal

functions over the vegetative, in proportion as

the intellectual functions excel those of passion

[illegible] of the brain attains a greater develop-

ment than the same part in another [illegible]

sion.

By the [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

understood as giving any reliance in the so called science of phrenology. But on the contrary, with all due deference to Drs. Gall & Spurzheim, their so called science seems to me to be an absurdity. There is no fundamental law of phrenology in that the mind consists of a series of faculties each having its peculiar locality in the brain: nor by reference to its anatomy it will be found impossible to establish such a distinction, as the nerve fibres are perfectly continuous throughout the substance of the cerebrum. Phrenologists divide the

faculties into three - natural orders, intellectual moral & animal, & the former in general lie most in the centre & the latter behind, again reference to comparative anatomy will show that the posterior lobes of the cerebrum machinery highest development in man, & they do not even exist in some of the lower animals, hence this classification at all events must be erroneous. Thirdly, Phrenologists estimate only about one third of the ascendancy of the brain to all the faculties of the mind, I cannot see why

the other two lines should not be laid down.

Lastly they refuse to admit the

conclusions by the elevations & depressions

which are sensible to manipulations

of the operator the examiner, but

such deductions may be manifest to

false though it be admitted that

each faculty of the mind occupies

a distinct locality, for convolutions

of the same size would give rise to

very different results, in accordance with

the variable thickness of the cranial

walls, in which should a large convo-

ition might not be at all perceptible on the external surface, simply forming a depression on its internal surface & conversely a small convolution may give rise to a marked elevation in a thin skull. The convolutions of the gray substance extend inwardly as well as outwardly & it is obvious that their internal dimensions could not be fully measured by external measurements of the cranium. Though the distinctions made by phrenologists do not exist in the brain yet there are anatomi

cells, separate & distinct from each other within the cranial cavity, whose peculiar structure the physiologist has endeavoured to trace.

In accordance with the great law of nature — to multiply the safeguards of an organ in proportion to its importance, the brain is protected by an almost continuous bony wall, constructed in such a manner that its contents are guarded ~~from~~ in the highest degree from any external violence, even including those from the influence of atmospheric pressure. The cranium is composed of a

number of distinct bones, thus allowing the brain to increase in size with age & at the same time protecting it with a nearly uninterrupted bony covering. The vault of the cranium is formed by the frontal bones, which being arched afford the greatest strength combined with their thickness, their union with each other being by means of numerous dentations which interlock with each other so that the force from a blow would be distributed over the whole surface. Anteriorly they articulate with the frontal bone which being usually a single bone cannot without

fracture be separated in the median line & in order to increase the strength of the frontal bones & to keep them firmly united with each other, the frontal bone is overlapped above by the two parietals, but in its turn overlaps the parietals at the sides, so that it supports them above & prevents their depression at the sides, in the latter, however it is assisted by the zygomatic arches of the sphenoid bone & the temporal bone which overlap their inferior edges. Behind the parietal bones are dipt by semicircular to articulate with the occipital bone which being a

single bone prevents their separation posteriorly. The temporal bone are wedged in between the sphenoid & occipital bones & prevents owing to its oblique insertion in either of these bones. The only remaining part of the cranium is protected from direct violence by its position being such that other bones must receive the shock before it can be reached.

If the bony wall be removed the whole internal surface of the skull will be found to be covered by a thick fibrous membrane, the dura mater, which adheres closely to the bones & consists of an external fibrous and an internal serous layer. The dura mater contributes to the

[illegible] the cranium & assists in the [illegible]

[illegible] the nerves which leave the cranium [illegible]

[illegible] finally it supports & protects all [illegible]

the [illegible] by sending numerous processes [illegible]

Since processes are 1st the falx cerebri which descends

between the hemispheres of the brain, & is divided

near its attachment. To the bones forming its roof,

strength, as in longitudinal sinus; & some [illegible]

[illegible] is the tentorium cerebelli which is attached to the

transverse ridge of the occipital bone, & [illegible] over

ing the lateral sinuses, & in front it is attached to

the [illegible] of the petrous portion of the temporal bones where it includes between its two

diverging laminæ. The superior medullary velum.

In the median line of its upper border the falx cerebri is a tacked, also dividing into two laminæ, edges the straight sinus. The office of the tentorium is to support the posterior lobes of the cerebrum & to screen most thoroughly from contact the cerebellum.

In this position is the falx cerebri which separates the lobes of the cerebellum.

Beneath the dura mater lies a thin serous sac, the arachnoid, its external layer lines the dura mater, but its visceral layer is thrown, towards upfolded over the brain passing over the convolutions of the brain without sinking down into the sulci from there.

Beneath the arachnoid membrane is a space called

the subarachnoid space filled with a clear fluid variou-

-sly denominated the cerebro spinal, subarachnoid &

cerebro rachidian fluid. The office, [illegible]

is of great importance as it protects the nervous

centres in various ways, diminishes concussion

communicated from without &c. lastly as the cranial

cavity is at all times occupied, some regulation during

increase or decrease in water amount of nutri-

-tion is required. In circumstances where not enough

exist, this fluid is drain[illegible] [illegible] the

spinal canal allows the entrance of the increased

amount of blood necessary to replace the waste

which it has undergone during activity.

Immediately beneath the subarachnoid fluid is the pia mater which consists of minute plexuses of capillary blood vessels connected by means of an extremely delicate cellular tissue. This membrane covers the surface of the brain and closely dips into between the convolutions & sending minute blood vessels into the substance of the brain, being the nutrient vessels of the brain; it is also prolonged into the infundibulum where it forms the choroid plexuses & the velum interpositum

As the brain is exceedingly delicate in structure some means are necessary to protect it against the

force of the arterial circulation, the blood being propelled from the heart by a force equal to six inches of mercury or over three pounds; accordingly & in spite of the general law by which the blood is sent by the shortest route & with the least expenditure of force to the tissue which it is to nourish, we find that the internal carotidas & vertebrals, on their direct course as soon as they reach the cranium, their direction becomes tortuous through the carotid canal inclining upwards then recurved & inward & again upwards & the posterior clinoid process, then passing forwards on the body of the sphenoid bone & again ascending

near the anterior clinoid processes in the posterior sinuses of the arachnoid. These cases are barely by increasing the extent of surface & the amount of friction must diminish the velocity or force of the current of blood; & in addition to this this force is still further decreased by the great number of ramifications into which the arteries subdivide before reaching the brain substance.

As the brain presides over all functions of animal life it is of the utmost importance that its nutrition should be continuous & we find that every measure capable of increasing this necessary supply of blood has been provided by beneficent nature

& the wisdom of our divine Creator has provided the necessary safeguards to insure under all circumstances an uninterrupted supply of blood.

In the case of the Bull contrary to the rule usually observed in the arterial tree the arteries inosculate freely forming the circle of Willis which is composed of the vertebral arteries which on entering the cranial cavity through the foramen magnum, coalesce from the basilar artery, which gives off the arteries mentioned above.

The latter are united with the internal carotids by means of the posterior communicating arteries; from the carotids give off the anterior cerebral

arteries which are connected with other in means of the anterior communicating arteries, thus a complete circle is established so that if either of these four arteries should be obstructed in any way the others would supply the whole amount required for the nutrition of the entire brain. The venous circulation is also peculiar in the brain, as there are here no muscular contractions to assist in the removal of the blood which is loaded with effete matter, but in place of them the veins are constructed so as to furnish another force, the power of respiration, to act with equal force & more regularity. The veins from large

sinuses which increase in calibre as they recede from the brain substance thus offering the least possible friction & obstruction to the onward course of the blood. Secondly the veins coats are closely adherent to the dura mater, so that when during the act of inspiration the vis a fronte is exerted on them they cannot collapse but must continue open & tubular, permitting the free egress of the blood. But as the force of aspiration ceases during expiration the blood cannot leave them with the same velocity & were it not for the tetanic in-flux of the cerebro-arachnoidian fluid

the blood would by its accumulation com-

press the delicate nerve fibres, the same thing

causing very deleterious consequences, which

however is entirely obviated by the subsidence

of this fluid through the vessels into the

spinal canal.

The great activity of the brain may be estimated

by the large quantity of blood required for its

nutrition, for although its weight is only

about one fortieth of the whole weight of the

body yet it consumes about one fifth of the

whole quantity of blood.

Beneath the pia mater lies the encephalon or

or brain are distinct. The largest distinct anatomical

portion is the cerebrum, which in man constitutes about nine tenths of the whole cerebral mass.

The cerebrum superiorly is of an ovoidal shape

broader behind than in front, convex in outline

& divided into two equal portions by the longitudinal fissure which reaches to the base of

the skull in front & behind; in the middle

the two hemispheres are united by the corpus

callosum a broad transverse commissure of

white nervous matter. The outer surface of the

cerebrum corresponds to the concave vault of

the cranium. The inner surface is flattened

& in contact with the opposite hemisphere. On its inferior surface it is of an irregular outline resting on the anterior & middle fossae at the base of the cranium & behind upon the tentorium. The lower surface is divided into an anterior, middle & posterior lobes, the anterior & middle lobes are separated by a fissure, the fissure of Sylvius. The middle & posterior lobes are united at the anterior margin of the cerebellum. The whole of its surface is marked by deep convolutions increasing in number & depth & complexity as we ascend in the scale of animals.

Structure like the spinal cord. The gray or cortex

Gray matter lies on the outside, the white matter, & is a continuous layer. By means of this situation & of the convolutions which are about one-sixteenth of an inch in depth the gray substance is very materially increased in amount without occupying a proportionate increase of space. The white matter of each hemisphere consists of nerve fibres radiating in various directions viz one set connecting the hemispheres with the cord & medulla oblongata, second set connecting the hemispheres with each other & a third set connecting different parts of the same

hemisphere. The cerebrum is developed in the human embryo as an offshoot from the sensory ganglia & be referred to comparative anatomy it will be found that in some of the lower vertebrates it is merely a slight band-like extension of the developed commissure as in the fish, barely sufficient to cover the corpora striata, but increases in size in proportion to the intellect of the animals covering in more & more of the ganglia until at length it reaches in man its maximum development & covering the whole encephalon with the exception of the cerebellum

The cerebral ganglia are the organs through which the mind manifests its influence on the sensorium; the evidence on which this conclusion is founded are (1) by exclusion, as all other functions are by experiment found to be lodged in other ganglia, & there remains no other function for it to fulfil. It cannot be concerned in receiving sensation or originating motion as neural experiment proves them to be entirely destitute of both sensibility & excitability. neither can be caused by galvanizing, burning, wounding or lacerating the cerebral lobes of the cerebrum. Second, the physiological analogy

Thirdly by comparative anatomy we find that the rate of development of the cerebral hemispheres is in direct proportion to the degree of the animals in life, and that is the weight of the cerebrum compared to that of the entire body, in reptiles the cerebrum is one twelve hundredth of its entire weight, in fish one three thousandth, in birds one two hundred & twelfth, in mammalia one one hundred & eighty sixth, whilst in man it is one fortieth of his entire weight. In the same order the size of the cerebrum in different races & even in different individuals of the same race corresponds generally

with the grade of their intelligence; but the functional activity of the brain is also modified by its texture so that increased excitability may compensate for deficiency in bulk. Fourthly from pathological observation the function of the cerebellum is evinced from its disease the intellect is affected in proportion to its lesion.

Fifthly its function may be deduced from direct experiments as when it is removed in lower animals. The effect of which is to change the animal into a state of profound stupor, the brain being nearly entirely inattentive to surrounding objects though its life may continue for

several stages with increasing intensity, the peculiar

functions & still remaining equally the of nervous tissue motion

& exercising its organic & perceptive powers.

So the conclusion to which we must then be that is

is it the centre from which the mind acts or is

it merely the terminus which receives & then

transmits simply views made by the mind?

For surely it certainly more nearly resembles

a peripheral expansion, being closely allied

to the retina or the peripheral expansion

of the tubuli gracilis cerebri & it would

be difficult to conceive how the immaterial

mind, the bond of union between our divine &

immortal nature & our material limited animal nature should be located in a material substance which like the rest of the body is subject to decay & of limited duration therefore I cannot avoid adopting the latter view, regarding the cerebrum simply & solely as the nerve terminus on which the mind creates its impressions & from which it, the mind, receives impressions conveyed to it from the surrounding world. The cerebrum may act without our being conscious thereof, or there may be unconscious cerebration as Sir W. Hamilton calls it, for I remember so in vain try to recall a name

or quotation which after a longer or shorter

period suddenly flashes across our minds to

after the attempt at recalling. Then has been

entirely abandoned. There seems to me but one

way to account for this namely that the sensorium

through which the ecbium must act in order

for us to become conscious is at the time en-

gaged in something else, it receives the impression

made on it but its action cannot take place

until it has rid itself of its former occupation

& then acting we become conscious of its impre-

sion & the name or quotation wanted occurs to us

as if just remembered.

Before leaving the cerebrum it will be proper to glance at its connections with each other & with the rest of the encephalon. The cerebrum is united to its fellow first by means of the corpus callosum a mass of closely interlaced fibres extending on the median line & at the bottom of the longitudinal fissure between the cerebral hemispheres ~~& [illegible]~~ These fibres immediate into the substance of the hemisphere on either side & radiate chiefly into the anterior & middle lobes but some also extend to the posterior lobes. Its office is supposed to be the establishment of harmony between

the two hemispheres. Under the corpus callosum

lies the fornix consisting of a mass of longitu-

dinal fibres arching down in front forming

the anterior crus on each side & may be traced

to the outer part of the corpus albicans &

thence are lost in the substance of the thalamus

opticus of the same side; behind the fornix

crura are found, one on the side, & passes down

wards into the lateral ventricles where they

are continuous with the hippocampus major.

The anterior & posterior commissures, the fornix

passing through the anterior division of the inter-

thalamic through the optic thalami penetrate the

intersection of the hemispheres on each side.

The taenia semicircularis, the peduncles of the pineal gland, the striae longitudinales, the gyrus fornicatus & the fasciculus uncinatus are all longitudinal commissural fibres employed to connect distant parts of the same hemispheres.

The pedunculus cerebelli serves to connect the cerebrum with the cerebellum, its fibres passing downwards & backwards through the crura cerebri & optic thalami to the cerebellum.

Finally by means of the crura cerebri the hemispheres are connected with the medulla oblongata.

Immediately beneath the posterior lobes of the cerebrum & separated from them by the tentorium lies the cerebellum occupying the two lower fossae of the occipital bone in size it is next to the cerebrum weighing over average about five oz & four drs. The cerebellum looks as if it were flattened from above downwards with its longest diameter from side to side. The gray or cinerelious matter is here also situated on the surface, & its convolutions are much more numerous & complicated, the sulci are much deeper than in the cerebrum so that in proportion to its size, it contains much more cinerelious matter.

If a vertical section be made through one of its hemispheres

in a similar way as with the [illegible]

[illegible] it consists of a trunk in the centre with radiating

branches & hence is called the arbor vitae. In the trunk

of the arbor vitae lies an isolated ganglion probably

the representative of the [illegible] & called the

[illegible] dentatum.

The connections of the cerebellum with the rest of

the encephalon are first by its upper peduncle or the

processus cerebello ad testes which passes forwards

& upwards to the tubercula quadrigemina beneath

which it ascends to the crus cerebri & optic thalamus

in its course it forms a part of the floor of the

fourth ventricle; secondly the inferior pedunculus or the processus ad medullam, which unites it to the medulla oblongata; thirdly the processus ad pons, which connects the two hemispheres of the cerebellum, it consists of a mass of fibres arising in the lateral parts of the cerebellum & arching over to correspond, with fourth thus forming the transverse or superficial fibres of the Pons Varolii.

Well & Flourens in their arbitrary experiments functions gave to the cerebellum that of amativeness, but far from being sustained by facts, the latter refute such an affection, for were it really the seat of amativeness it would certainly i-

as well as fully developed in the lower animals as in man, but comparative anatomy shows that its development keeps pace with that of the organism attaining its maximum in the human being.

Furthermore if the assertion of phrenology is true since the cerebellum would certainly be less developed in a castrated animal than in one whose reproductive organs are unimpaired, but this not the case where the cerebellum of castrated animals and entire animals is much larger in the latter, hence its greater development in the latter must be owing to some other cause.

In the hospital for foundlings in Paris a case of idiot is quoted who having been castrated

to mastur bation that the authorities were forced to

put her in a straight jacket to prevent her from

so doing, when this child died the post mortem exami-

nation revealed that she was entirely destitute of cere-

bellum. There was however one peculiarity manifested

in this young girl, her gait was staggering, similar

to that of a cerebellic, whenever she attempted

to walk she would fall to the floor. This appears to me

to be strong evidence of the truth of the views

entertained by Flourens with regard to the function

of the cerebellum, though Dr Dalton's experiments

seem to cast some doubt on this correctness but I

do not think his opinion unanswerable.

Flourens regarded the function of this ganglion as that of coordinating the various voluntary movements & it was based upon the fact that induced by injuring the cerebellum. He exposed the base of the skull in a pigeon & then removed a portion of the cerebellum. The animal just immediately became unsteady & the movements of its voluntary muscles, in consequence the amount of injury, the bird lost the power of flying altogether, being able to stand or walk only with extreme difficulty; though it was not in the least paralyzed for in some instances it could still exercise the but had however no control over the muscular contractions of its limbs so that its motions were con-

ness & blundering. The birds in intellectual faculties & its susceptibility to injurious impressions remained entire, were impaired after the experiments. These results invariable follow this operation & would evidently point to the correctness of Flourens's view as to the office of the cerebellum. Though Dr. Dalton found that if the animal survive the operation it would recover the co-ordinating power in the process of time. In support of his opinion Dr. Dalton relates four cases in which he removed in one two thirds & in the three others one half of the cerebellum; immediately after the operation he observed in all four cases the same want of co-ordination in the muscular movements

ments but in a little more than a fortnight.

The animals had nearly or quite recovered their natural control of their motions, on killing the animals he found that nature had made no attempt at regenerating the lost parts, he therefore very justly

that the effect observed by Flourens was due to shock of the system in consequence of the operation & not to the removal of the cerebellum. But as in neither instance did he remove the whole of the ganglion it seems to me that the subsequent recovery of these animals does not prove Flourens to be erroneous but only the wonderful power of nature to accustomed itself to surrounding circumstances.

this power we are exhibited everywhere. Bernard found that if a bird be put under a bell glass & the atmosphere be gradually replaced by carbonic acid, the bird would continue to live in an atmosphere which would instantly kill a bird in it, and the fresh air & thus introduced. The continuance of the bird did not prove that it did not require fresh air for the continuance of its life. In another case a man lived without manifestation of one not square foot, or, to take his counsel & one of the vital functions had ceased, gradually excluded by disease, which in this case, was equal at the same time the individual would undoubtedly have fainted, thus we see that [illegible]

[illegible] the sense is not usually derived from the ethmoid cavity nasal.

10. Comparative anatomy also seems to favor the opinion of Stannius proving that the development of the cerebellum corresponds very closely with the varying proportion of volume transmission of which the animal is capable.

First lobe of the cerebellum is the anterior lobe of the cerebellum & lies on the cribriform plate of the ethmoid bone. Its olfactory nerve or ganglion. It is a collection of gray matter surrounded by the white substance of Stannius, small & oblong in shape. It gives off small fine nerve filaments, not collected into bundles,

from the under surface, these filaments are distributed

to the mucous membrane of the nares. Its connection

with the encephalon is by means of three com-

missures or roots, the long water narrow bundle or

medullary band which passes across the fissure of

Sylvius into the substance of the middle lobe of the

cerebrum, its deep origin may be traced to the optic

thalamus & to the superior pineal fibres, the optic

thalami. Its second or middle root arises from the

anterior lobe of the brain & is connected with

the corpus striatum by means of white fibres;

the third or short root also rises from the anterior

lobe of the cerebrum.

The office of the olfactory ganglion is undoubtedly that of imparting the perception of the sense of smell as indicated by its anatomical distribution & by the evident correspondence which exists in different animals between the degree of its development & that of the external olfactory organs. Though these ganglia may be easily destroyed from without yet owing to the impossibility of determining the existence or non existence of the sense of smell direct experiments on the lower animals cannot prove that this is its function.

The optic thalami are two long oblong masses situated on either side of the third ventricle & partly forming

the floor of the lateral ventricles. Externally they are covered by the white substance but in the centre are composed of a mixture of white fibres & cinerituous matter. They are connected with the cerebrum & cerebellum [illegible] by means of the crura cerebri on which they rest. They form a part of the encephalon, they have no connection with vision as their [illegible] would imply. Longet found that their irritation produces [illegible] contraction and dilatation of the pupils & their removal in birds did not impair vision nor the sensibility of the retina. Their function according to Longet is a peculiar crossed one on the voluntary

movements, he arrived at this conclusion by observing the effect produced on a rabbit after the removal of one of them. He states that the animal fell on its opposite side, wanting the power of balancing himself but he was not paralyzed on that side. Removal of both of the thalami no longer produces this effect. The real function must therefore be looked upon as still undetermined, the mechanism of the functional disturbance spoken of by Longet not understood, neither direct experiment nor comparative anatomy throwing much light on their real function.

The corpora striata are two large ganglionic masses situated in front & to the outer side of the optic thalami; they consist of an intermixture of substance through which radiate white fibres. They are connected with the medulla oblongata by means of fibres which are the continuations of the anterior columns of the cord & with the cerebrum by means of the continuation of these fibres into the substance of the hemispheres. Its function is as yet unknown though from its anatomical relations it must have something to do with volition & sensation but the precise nature of this connection is still unknown.

The vitreous and retina are [illegible] covered

by, is placed in pairs two in front & two behind

the median [illegible] commissure, they are situated

just behind the posterior commissure & the

third ventricle under the posterior [illegible]

the corpus callosum. The anterior pairs or

nates are the larger & consist of white matter enclosing

a mass of gray matter, the posterior pairs are less in

size of a lighter color but similar in structure

& more [illegible] [illegible] in size, are

connected with the optic thalami & with the

commencement of the optic tracts, the connections

between the optic thalami & the nates are called

the brachia anterior which are given the union between the lens & the optic thalami called the brachia posterior. By means of these brachia they are connected with the cerebrum & with the cerebellum by means of the peduncles and lens & with the olivary tracts by means of a few white fibres. Their principal function is to preside as sentinels over the sense of sight for they give origin to the optic nerves. In development they correspond to that of the external visual organs in various animals, being large in fish & birds & reptiles like their eyeballs in proportion to the size of their heads. [illegible]

quadrupeds & man. This function may be determined by a direct experiment for section of the optic nerve or the decussation of the tubercula quadrigemina produces complete blindness, but sight remains if the section be made between them & the cerebrum, & even after the complete removal of the cerebrum, hence the perception of impressions of light resides in these ganglia. The distribution of the nerves follows in the optic tract & nerve a regularity from each tubercle three fasciculi thus distinct sets of fibres which at the optic chiasma or semi-decussation, one set goes directly onwards to the retina of the same side; a second set to the

over in the chiasm to the retina of the opposite side. The third set turns in the chiasm backwards & goes to the other hemisphere. & lastly a fourth set not originating from the cerebral cells proceeds from one retina, passing through the chiasm & is distributed to the other retina. The cerebral hemisphere is connected with both retinae & with each other, & the retinae are also connected. The retinae are connected with each other for the purpose of keeping corresponding points so adjusted that an image reflected on them will fall on corresponding parts of the two retinae. This is dis[illegible] of the three sets

of fibres originating in the tubercles has been conjectured by some physiologists to be for the purpose of securing singleness of vision; by their distribution to corresponding parts of the retina. The image reflected through double one on each retina would be perceived single because each tubercle would only take cognizance of one half of the image. Lastly the connection between the two nuclei causes harmony in their action. Some explain singleness of vision by supposing that the retinae act alternately but so rapidly succeeding each other that it appears as if the action were continuous.

The substantia nigra besides serving as a movement for the perception of light also acts as centres through which occurs a reflex action for it regulates the quantity of light admitted through the iris. If an impression is made on the retina, nerve fibres transmitted along the optic nerve to the substantia nigra where it is converted into a motor influence & propagated along motor elements to the iris & thus causing constriction of its circular fibres thus excluding the excess of light. This function is proven by actual experiment for if the optic nerve be irritated while the eye is connected with the

brain the pupil will contract but if the optic nerve be divided & the distal end irritated the pupil will not contract.

The tubercle annulare is a small collection of gray matter lying beneath the transverse fibres of the pons Varolii directly in the course of the ascending fibres of the anterior & posterior pyramids from which it is formed. The function of the tubercle annulare according to Longet is the perception of sensation & voluntary motion for when he removed all the encephalon except it & the medulla oblongata there was sensation & still existed & the animal still endeavoured to escape from by voluntary motion

&, as soon as the tube annulus was broken up

that all manifestation of sensation & volition

immediately ceased, consciousness appearing

then to be entirely destroyed; he could excite no

motion in the animal which continued to live but-

those due to reflex action of the spinal cord.

Longet then we conclude that in this ganglion

impressions from without were converted into

conscious sensations, & that voluntary impulses

which stimulated muscles to contraction originated

in it. Being the sensations & sources of volition are very

different & must be distinguished from the ideas

to which they give origin in the mind the latter

being finally a central decussation of nerve tubes

place in the medulla.

The medulla oblongata is the superior extension

of the spinal cord, it is about an inch & a quarter

long & lies in the groove of the basilar process of

the occipital bone within the cranial cavity.

It resembles a truncated cone & consists of two

anterior pyramids, two olivary bodies, two restiform

bodies & two posterior pyramids. At its lower the

anterior or motor columns decussate that is the

fibres of one column crossed over to the other so that

if these columns are divided above this decussation

motor paralysis of the opposite side of the body

crossing; which if the division be made at the point of decussation, it is without immediate motor paralysis of both sides. The anterior pyramids & the olivary bodies are respectively continuations of the anterior & lateral tracts; the cells, in turn, according to Brown-Sequard motor tracts; the fibres of the anterior pyramids pass under the superficial fibres of the same side to the corpora striata, through the substance of which they go to decide in the gray matter of the cerebrum.

The anterior & posterior pyramids are not so well understood, their function is probably proprioceptive & tonic action; their fibres disappear in & [illegible]

vein, partly distributed to the corpora mamillaria of the cerebellum, the left passing forwards beneath the tubercula quadrigemina under & go through the optic thalami to be ultimately distributed to the cinereous matter of the cerebrum & some of the fibres of the centrum ovale, and also join those of the restiform bodies which are distributed to the cerebellum.

As the posterior pyramids & the restiform bodies diverge from their fellows they form the calamus scriptorius — so called from its shape &, when exposes some of the central gray matter. But this is most essential part, the human

frame, for here is the respiratory ganglion from which originates the pneumogastric nerve, that which conveys the sense we know as the besoin de respirer — a sensation which though originating in every part of the body where there is a deficiency of aerated blood, is referred to this nerve which by reflex action stimulates the respiratory muscles to contract thus dilate the chest & admit air. This function is purely a reflex action: for it is thus performed, without consciousness on our part of its being exercised. We may, however, will can control this reflex action to some

other is, however, to a certain extent but no

mental effort however powerful is able to

stop it altogether; in the course of a very short

time the demands of the system become so

imperious that the pneumogastric not

only performs its function involuntarily, but

also of all mental exertion to prevent it.

Gies! above the respiratory ganglion lies that

of the auditory nerve which receives & conveys to the

consciousness impressions of sound conveyed to

it in manner similar to the nerve

above the latter & in the floor of the fourth

ventricle lies the gustatory ganglion & from it

originates the nerve filaments distributed to

the tongue through the two nerves of gustation.

At the nib of the calamus scriptorius is a small

mass of vesicular matter called by Flourens

the vital point not longer than ninth part,

named thus because he supposed it to be the

seat of life, as he thought that its removal

would cause instant death. This is a mistake

for it may be removed without such a result.

It the medulla oblongata is the seat of incessant

division; when death occurs it is due to a lesion

from the vagus. It is also the origin of the

vasomotor nerves, it does not communicate with the content

causes, [illegible] the sense of want of nutrition

this ganglion is really the respiratory ganglion.

Bernard found that puncture of the medulla

oblongata just below the origin of the

nervus vagus, between it and the auditory gan-

glion would give rise to an artificial diabetes

mellitus, & the result is also frequently observed

in pulmonary disease in which the fran

vacuum is of less tension, a pathological condition.

Therefore it seems to me, though I have no

authority for making this statement, that the

some of the terminal filaments of this nerve

are distributed to the liver. The irritation

of the medullary nervous system acts as a stimulus to the glycogenic function of the liver, producing by its action, thus causing the disease.

As we have seen the vision centre of the brain system is characterized by a symmetrical double, or being composed of two perfectly similar halves, various opinions have been entertained as to the object of this arrangement respective; it seems to me that each half is capable of meeting the requirements of the system & that each half is a distinct organ, itself, but that two the eye or ear through capable

of separate action that do & can act so either

either as some suppose increasing the effect

of their combined action in one side or

the deficiency of the other or by such a rapid

alternate action that the impression appears

as continuous; the former seems

the most probable. The hemispheres have

been known to act alternately in cases of

insanity when the individual would live

two distinct lives, during one period his

existence would be according to a certain

set of ideas & feelings in another period

set seemed to be his guide, he never recol-

having his actions or ideas; the another period. This pathological condition has been frequently observed but I do not know of a single instance in which an insane person seemed to live three distinct lives. In one case the person upon becoming insane spoke two languages but when this apparent alternate action occurred he spoke one in each period & could not or did never comprehend the language which was not peculiar to that period.

It would be difficult to define sanity, some have defined it as the partial suspension

of the activity of the mind & of the sensorium

but such a definition is to say the least a

very imperfect one, for the mind is of ten

very active during sleep as in dreams. Besides

it can cannot be regarded as a unity but as

a series of fluctuating conditions during which

one sense may be suspended or asleep & another

in a state of activity. The waking & sleeping

states merge imperceptibly one into the other

The highest power of the sensorium is the con-

trol of the will over the operations of the mind,

or the concentration of our thoughts. The sensorium

is not the seat of the will as we have seen. But

in order to be conscious the cooperation of the sensorium & of the cerebrum is required; hence in passing from a state of wakefulness to one of sleep the first power lost is that of concentration of thought, the will being suspended while the other functions of the brain are suspended as an illustration I may cite my own case. During my ~~absence~~ first course of lectures at the University of Virginia I devoted habitually nineteen to twenty hours daily to study & consequently nature often would claim her dues & I was forced to adopt all sorts of expedients to prevent me from sleeping

one plan I adopted was to read the lecture of the morning day aloud to one of my companions & though reading myself, though my companion had heard & understood the subject I was frequently totally unconscious even of the subject which I had been reading & was forced sometimes to reread twenty pages the contents of which were entirely new to me.

The second step toward sleep is the loss of control over our bodily movements as evinced by the pain we experience after falling asleep while in an uncomfortable position, we feel the pain but cannot move from the consciousness

posture. This is soon succeeded by the loss of sensational consciousness; which is followed by the loss of the power of exciting cerebral action through the medium of the afferent nerves. as exemplified by the failure of external sensation to excite dreams which frequently occurs when this condition is present under, the first power lost is the sensory & physico reflex action. The reverse is the order followed when recovering from a state of sleep or waking. The physiological condition known as coma is a prolonged sleep of various degrees as it includes the condition from which it is difficult to

arouse the patient & that though there exists complete unconsciousness yet the patient is more or less easily aroused.

During sleep the functional activity of sensorium is more or less suspended during sleep & in proportion to the degree of sleep; but that of the cerebrum are never totally suspended though some maintain that the mind is in a state of torpor or absolute repose

There is a periodical tendency to the recurrence of sleep & that irrespective of the amount of wakefulness, the brain requiring a certain amount of sleep as well as the body.

The exciting causes of sleep is a monotonous repetition of gentle impressions on our senses, as a soft breeze, or the murmuring of a brook, such impressions being just sufficient to engage the attention of the mind & to prevent its wandering in other tracks for all sensations or thoughts which require mental activity, prevent sleep. The proximate cause by some is supposed to be a slight congestion of the capillaries of the brain but it seems more plausible to suppose it due to an opposite condition of those vessels as the supply of blood in and organ is in proportion to its activity & hence an abundant supply

the activity of the circulation is decreased therefore the amount of blood must be proportionately lessened. Sleep has been called nature's own restorer, the organic or vegetative functions are seen to be more active during sleep, but they are really also less active than in the waking state. But repair is more active because the waste is so much diminished. The amount of sleep required by each individual depends on his age; and in ordinary circumstances, the time an adult requires is from 6 to 8 hours in the twenty-four; temperament as the sanguinotic requires more, the nervous less; habit

Dreaming may be defined to be the result [illegible]

activity during [illegible];

for I think it is probable that the activity of the

cerebrum is only diminished not suspended during

sleep, that now remembrance of this mental

activity is no proof of its non existence for in the

most perfect dream viz that of a somnambulist

the person fails completely to recall his actions

when awakened. Some who hold that the mental

activity is totally suspended during sleep regard

dreams as the action of the mind during the

transition stage from sleep to wakefulness.

but the various stages & length of dreams under

that supposition rather improbable. Besides many facts seem to prove that the mind is active during sleep as for example persons are frequently wakened by the cessation of familiar noises, the ability of persons to wake at given hours even when unusual as when travelling I can always rouse myself at the required time again persons can be wakened by forming previous engagement as in the case of an english signal-man who could only be roused with the greatest difficulty but when he had made an engagement to rise at a given hour would waken when called in a low whisper, again in my own case I re-

member on two occasion being roused by the servant
who was in the habit of making fires in the
morning, because his fire had gone out & he
on these occasions came to my bedside to get a
match which he was not in the habit of doing
& that though he made no more noise than
usual in fact but simply because he came
into a portion of the room where he did not
usually go. Again whilst at a gentleman's
house during the war a servant attempted
to rob my pocket & awoke as soon as he
took my hand & seen him running to take
possession of some money in the pocket book

& yet he made less noise than if he had kindled the fire as usual. These facts appear to me to be conclusive evidence of mental activity during sleep. The other opinion which maintains that if there were mental activity during sleep it would be remembered I think is refuted by the somnambulist forgetting his dream & our explanation why this action is forgotten seems to me to be given by the torpor or more or less complete suspension of the sensory ganglion whose activity is required in order that we should become conscious of the action of the mind.

It has been asked how can the reinvestment

of the mind by sleep be accounted for if its activity be not suspended? My reply is that voluntary exertions of the mind alone fatigue us it. simple automatic flow of thought is accomplished easily & without exertion & therefore requires no rest or recuperation. We believe in the reality of our dreams because to prevent incoherent ideas, the sensory ganglia must be perfectly & fully active, but that would be inconsistant with sleep. hence in sleep our thoughts are accepted as real because we cannot institute comparisons by which their incoherence would become apparent.

I had intended to enter more fully in the consideration of the various physiological phenomena of the brain but I find that I have protracted the subject although I endeavoured to be as concise as was consistent with clearness. I shall therefore refrain from trespassing any longer on your indulgence which I crave for the errors which want of experience may have caused me to commit.

Respectfully submitted to the examination of the Dean of the Faculty of Medicine of the University of Maryland

James Dunlop Monroe.

AN

Inaugural Dissertation

ON

Pneumonia

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Newton D. Baker

Of

Jefferson County Va.

Session of 1867-68

Pneumonia or Pneumonitis is an inflammation of the parenchyma of the lungs or in other words, of the lung tissue proper. The inflammation begins in the mucous membrane lining the air cells, occasionally extending into the minute bronchioles. The difference between the cell and bronchial mucous membranes, (the former being squamous or tessellated, the latter cylindrical or ciliated) accounts for

The infrequency of the inflammation extending into the bronchial tubes. Pneumonia generally attacks but a single lobe at a time; and when a second is attacked, it is by a fresh invasion. Consequently, different portions of the lungs are found in different stages of the disease. Pneumonia may very properly be divided into several varieties, Lobar, when a whole lobe is involved; Circumscribed, usually a complication of some other disease; Lobular, when isolated lobules are

affected; the variety mostly occurring in children, and also a chronic form of the disease. We propose to confine ourselves to the consideration of the lobar variety, and will first notice its anatomical characters.

Pneumonia is usually divided into three stages, 1st. the stage of congestion or engorgement; 2d. that of red hepatization, or solidification and 3d. gray hepatization, or gray softening.

The first appreciable change noticed as a result of the inflammation

is an abnormal quantity of blood or hyperæmia; due to active congestion or engorgement. The inflamed portion of lung is found to have increased in weight. Blood exudes from its cut surfaces together with a little frothy serum. It is often difficult to distinguish this condition of hyperæmia, from that due to hypostatic congestion. The latter however is always found in the most depending parts of the body. The air cells contain a certain quantity of air, which may

or expired out. This stage is of short duration quickly followed by the second or that of solidification,

A coagulable material is expuded from the blood; the air forced out; the cells completely filled, and the whole becoming a solid mass. Its cut surfaces resemble very much those of the liver; hence its name red hepatization. Its weight is increased; a portion of solidified lung thrown into water immediately sinks. This increase in weight is due not to any accumulation

of blood; for it is really less than in health; but is the quantity of solid matter drawn from the blood.

If a favorable result takes place the exudation is wholly or in part removed by absorption. The cell walls are found to have sustained no injury, circulation is immediately reestablished the secretion of the organ restored and the patient goes on to recover.

In other cases we have not this happy result, instead of removal by absorption, we find abundant infiltration.

This constitutes the third, or stage of gray hepatization; the tissue is broken down, resulting in pulmonary abscess. Pus exudes from the cut surfaces. Pleurisy is almost a constant complication. Pneumonia attacks by preference one of the lower lobes; and the lower lobe of the right, oftener than of the left lung. Exceptionally it attacks one of the uppers, especially if there exist any other pulmonary trouble.

The sputum is generally prominently being ushered in usually by a well

Marked chill, at other times by rigors.

Pain more or less severe, somewhat circumscribed, and if in complication with Pleurisy confined to the affected side. The complication of Pleurisy is however so frequent, that where the pain is very severe, it may almost always be looked upon as the cause. The pulse is frequent ranging in different instances from eighty to one hundred and twenty beats in a minute. In some few cases it even rises above the last named amount. In robust, persons full and bounding, not easily compressed.

The respiration is increased numbering from thirty to sixty to the minute, and the relative frequency of the respiratory act, to that of the Heart's action being entirely lost. Cough is another prominent symptom; though entirely wanting in some four cases, the expectoration is at first glary or mucous: a little later, by the admixture of a small quantity of blood it becomes of a rusty color. This when present is pathognomonic of the disease. Unfortunately it is absent in a small proportion of cases. As the disease

assumes a graver type; the expectoration becomes fluid, or serous juice in character, which is a very bad prognostic symptom. The fever is usually high, Delirium may be present, as a coincident of the high febrile action; or denoting gravity of disease.

During solidification the pain somewhat abates; Cough is less troublesome. Peculiar bright-red spots appear upon the cheeks; and if Phthisis be excluded, they are almost pathognomonic. Examination of the Urine also gives us some valuable

information. Solution of Nitrate of Silver, fails to cause any precipitate, showing the retention in the system of its Chlorides. The same is the case in some other affections; but in none is it so constant, as in the one under consideration. As recovery progresses its different stages, may be noted, by the approach, to their normal quantity, of the Chlorides in the urine.

Pneumonia has various and many complications, pneumonia among them and intermittent fever, & delirium tremens

It is not unfrequently received as a complication of typhoid fever which must not be confounded with a true form of the disease known as typhoid pneumonia, which typhoid symptoms exist, without the lesion of that disease. In the third stage or that of inversion, irritation, chills and rigors and of frequent recurrence, the degree of prostration becomes excessive, the expectoration sanguent or brownish, abscesses are formed by the disorganization of the tissue, and termine

in a few cases may be present; it is detected by the peculiar, and fetid odor of the breath. So characteristic of gangrene.

The diagnosis of Pneumonia, is more correctly made out, by means of the Physical Signs, than by the Symptoms. In the first stage we find slight dullness on percussion. Auscultation reveals during inspiration a fine Crepitant Rale, differing from the crackling sound heard in Phthisis; and considered pathognomonic

of the disease. When the aggregation has taken place, there is an entire absence of all vesicular sound: that, owing to the better conducting power of the solidified lung, a blowing sound is conveyed to the ear, produced by the passage of air over the bronchial mucous membrane. Bronchial respiration of the patient's breath, the voice appears to be formed immediately under the ear, technically known as bronchophony. The vocal fremitus

is also increased. Complete dulness or rather flatness on percussion exists in this stage. The normal sounds in the healthy lung increase in intensity in consequence of the increased of extra labor imposed upon it. If the exudation be removed by inspiration as is the case in most instances which terminate favorably, the dulness, crackling sounds are less marked. The normal vesicular murmur gradually makes its appearance; while the bron

that sound becomes less evident,
by the mingling of the returning
bronchial, and returning vesicular
sounds. We have the broncho vesic
ular respiration of Dr Flint.
The physical signs of the third
stage, are nearly identical with
those of the second, if a cavity
be formed, by the disintegration of
the lung substance, a cavernous sound
is evident, this is rare as patients
usually succumb to the disease
before this stage is reached.

The Prognosis is influenced greatly by the Complications which so frequently arise in the Course of the disease. The tendency of Simple, uncomplicated Pneumonia, is to recovery, in Children in Youth, in proportion to the Amount of Lung tissue involved, the Prognosis is considered unfavorable by the occurrence of Pleurisy, Infarcts, Delirium Tremens, &c. When Suppuration and Abscess occur, recovery is hard, Much depends upon Auscultation

of the patient, as the most un-
promising cases, sometimes end
in recovery. The symptoms in-
dicating an adverse issue are,
and great frequency & feebleness of
the pulse; hurried respiration; apathy
wild delirium; in typhoid cases low
and trembling, lividity of the
prolabia, sordities tenacious, or
bloody or rusty-tinged expectoration
convalescence from pneumonia
is usually rapid and uninterrupt-
ed. In those cases where tubercles

have been discovered, for an attack of pneumonia, would be from sudden a consideration a predisposition than as the result of the pneumonic inflammation.

The cause of this frequent disease is certainly found exposure to cold or wet, to age or sex and exempt from its ravages. Men are more frequently attacked than women. The result of their greater exposure, also prevalent in the middle and Southern states than in the

Northern States.

The Pathological Character of This disease is peculiar. In inflammation of the Pleura, the exudation becomes organized, in that of the air passages; it is expectorated; but in Pneumonia it is reabsorbed, or breaks down into pus.

The clinical history of no disease has been more carefully studied; or correctly made out, than that of Pneumonia; yet in none does there exist

greater diversity of opinion as to treatment. We find one class advocating depletion, to its fullest extent, bleeding both general and local, with the use of depressing drugs. Another class using universal stimulation. Fortunately for humanity, there is a third class and numbering either of the former, who take a happy medium between the two extremes, not liberty to deplete or stimulate as the indications seem to require, in other words treating the symptoms as they arise.

The treatment suitable in each stage of the disease, is somewhat different. Blood letting, the most potent of all remedies, has by many been thought adequate to arrest the disease, in the first or stage of engorgement: but the possible if not highly probable bad effects from so far reducing the vital powers of the patient, precludes its use. This will depend much upon the patients strength and vigor of constitution. There is one condition, however, in which

all agree, that the abstraction of blood is of the greatest utility, viz, when from retarded Pulmonary Circulation, the right cavities of the heart become distended, causing great dyspnoea, with increased and irregular action of the heart. In these cases, the abstraction of blood, restores the equilibrium of the Circulation, and lessens the difficulty of respiration. Local bleeding is not subject to the same objections, and acts beneficially also as a revulsive.

If it be deemed necessary to move the bowels, a saline aperient should be used, opium in some one of its forms, to allay pain, and produce sleep, "Dovers powder" is both anodyne and diaphoretic. Tincture of lobelia applied to the chest is both alterative and counter irritant. Hot fomentations turpentine stupes &c. will be found highly useful, An oil silk packet covering the whole of the thorax, keeps the body moist, and at an even temperature, another advantage is, that it

promotes physical exfoliations.

In the second stage two new conditions arise, to which the attention of the physician should be directed, first the patients strength must be supported till the exudations can be reabsorbed, the second is to facilitate if possible the removal of the exuded matter, Nourishing diet, easy of digestion, such as beef essence; milk &c, will meet the first indications, the old plan of starving patients, is fast losing ground, the theory that food is

Inflammatory has at last been exploded.
and no physician whom prejudice
does not control, would think of
withholding from his patients
life giving aliments, Iodide of
Potassium is thought to be a Sorbe
facient, In most cases Nature speed
ily removes the exudation, Mercury
at one time enjoyed quite a reputation
for its Sorbefacient powers; but at
present is rarely if ever resorted
to, If the fever continues some
febrifuge mixture may be given,

Preparations of ammonia, are thought to prevent the formation of heart-clots. If the disease runs into the suppurative stage, Alcohol, Carbonate of Ammonia, &c should be added to the measures already in use to support the patient. Expectorants do little good so far as the Pneumonia is concerned: but may act beneficially upon the attendant Bronchitis.

Complications should be met with remedies, appropriate to them

When Intermittent fever exists

Limnia should be promptly administ-

-ered, During convalescence, tonics

such as Iron, Quinine or some

of the simple Bitters should

be used, Fresh air, and early

exercise will hasten the convalescence

and restore the strength.

N. D. Baker